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Original Communications.

PUERPERAL INFECTION.[1]

By MATTHEW D. MANN, A. M., M. D., Buffalo, N. Y.

IN LAYING down my office, I look back upon the time of my incumbency as being one of the most important periods in the history of the Academy. Three events have marked the year, all of which are steps in progress, and must have a considerable influence in the history of our Association.

My immediate predecessor, Dr. Park, in his valedictory address suggested that the publication of the Transactions would be of great use to the Academy and to the profession. As I had long held this opinion, I determined at once to try to have the idea carried out. Dr. Potter, of the BUFFALO MEDICAL JOURNAL, was very willing to accept the Transactions, and I found the secretaries of the various sections, when the matter was clearly put to them, quite willing to get up reports of the meetings for publication. How well they have done their work, you all know. They certainly have accomplished very creditable results, and the Academy owes them a debt of gratitude. Personally, I am very deeply indebted to them all for having so ably followed out my suggestions. The plan having been once inaugurated, I do not believe it will be likely to be given up. It cannot but add to the strength of the Academy, and ought to make its discussions of more interest and importance, and to spread its influence widely throughout the profession.

The second event of importance was the establishment of a new section devoted to diseases of the eye, ear, nose and throat. The idea of this was not new to me, and when Dr. Bennett brought it by resolution before the Council, I was very glad to throw my influence in its favor. It is directly in the line of growth and development, and I feel sure that the new section will increase the interest in the departments to which it is devoted and add materially to the usefulness of the Academy.

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[1] The President's valedictory address before the Buffalo Academy of Medicine, June 12, 1900.

The rooms which we so long occupied on Main Street were never very desirable, and at times during the last year they have been crowded to their utmost.

The necessity for a better meeting place for the Academy has long been felt, and the trustees have now provided a most excellent place, the one in which we now are. The offer of the University of Buffalo, to give a room, free of expense to the Academy, while it had some advantages, did not seem to meet with general approval. The hall put at the disposal of the Academy is not well arranged for such meetings, and I think the Academy did very wisely in refusing the offer.

The plan of dropping those of the Fellows who were several years behind-hand in the payment of their dues, was according to the constitution, and has worked well in two ways In the first place, it has added materially to the income of the Academy; and, secondly, it has cleared the rolls of the names of those who have ceased to be active and interested Fellows.

I am sorry that the increase in membership during the last year has not been greater. A large number have been asked to join, but have refused. The membership should include all the active members of the profession in Buffalo and its suburbs.

The character of the papers which have been read during this year is certainly up to the standard of previous years. Some of the out-of-town papers have been of great interest and have drawn large crowds. It does seem to me, however, that many of the papers by our home Fellows have been quite as good and quite as deserving of a good turn-out as those which were read by outsiders. We certainly should not neglect our own Fellows when they prepare themselves to entertain us. I have been quite ashamed at the attendance on some evenings, and proud of the papers which have been read, and wished very heartily that the writers had been encouraged and complimented by a larger audience. I sincerely trust that interest in the Academy will increase, and that it will continue to prosper, until it becomes one of the leading medical societies of the country. To my successor and his assistants, I leave the task of carrying on the good work, and of introducing new features, feeling confident that they will have a support equal to that which you have so generously afforded me. In the name of the Academy, I wish to thank the various officers who, during the last year, have carried on its affairs so successfully.

. . . .

I will now pass from the consideration of the Academy matters, and ask your attention to one which is of great importance to every general practitioner. I have nothing new or original to offer, but have striven to collect the latest ideas regarding puerperal infection. I know that many general practitioners are too busy with their round of work to allow of careful study of all the newest books and journals, and, while I realise that you are all familiar in a general way with the advances which have been made in our knowledge of puerperal infection, still I think it will be good for us if I gather together in concrete form the latest ideas, together with what seem in my judgment to be the best rules of practice.

Up to very recent times—in fact, within the lifetime of many here present—the whole subject of puerperal disease was wrapped in deep gloom and obscurity. The first ray of light came from the writings of Oliver Wendell Holmes, who, in 1843, entered an earnest plea for the acceptance of the doctrine of the contagiousness of puerperal fever. A few years later Ignatius Semmelweis, then an assistant in the General Hospital in Vienna, showed the identity of puerperal and surgical fevers, and that puerperal sepsis was conveyed from the postmortem room by the hands of the examining students. Both Holmes and Semmelweis were met by the most determined opposition. Satire and ridicule, invective and abuse, were heaped upon them; but, in a very short time, both were shown to be right, and their ideas are now the commonly received theories of the profession.

I wish I had time to give you a brief review of Semmelweis's history. It is exceedingly interesting, and only shows how hard it is for the human mind, unless it is filled with the true scientific spirit, to accept new ideas. I do not think anyone today could be treated as Semmelweis was for the advocacy of a new pathological doctrine. Poor Semmelweis finally wore himself out and fretted himself into insanity. He could not stand the ridicule and opposition to which he was subjected. Curiously enough, he died of a septic wound received during an operation, just before he was committed to an asylum.

As Hirst says, "It is to be hoped that the medical world of today, and of the future, can never be deaf and blind to such an appeal as that of Holmes, or to such a demonstration as that of Semmelweis."

Later came the discoveries of Tyndall, Pasteur and Lister. The idea of a distinct puerperal fever was then given up, and we now recognise the processes which are grouped under this heading as being practically the same as those which are found elsewhere and under other conditions. Following labor, the genital canal very closely resembles a wound made by a surgical operation. The frequently occurring lacerations of the cervix and perineum, when they are present, make the analogy still closer. The study of pathology has shown that the diseased processes affecting surgical wounds and the puerperal genital tract are precisely similar, only modified in a slight degree by the peculiar conditions in each case.

So now we understand puerperal fever to be really puerperal septicemia, and to be due to the entrance into the system of certain bacteria which are known to have definite pathogenic properties.

The bacteria which have been found to be the causes of puerperal fever are the streptococcus, the staphylococcus, the bacillus coli communis, and the gonococcus. Besides these, a considerable number of bacteria have been found in the organs and secretions of women sick with puerperal fever. The Klebs-Löffler bacillus is, perhaps, the most important. I will not, however, weary you with a long list of doubtful forms.

The main question for us, as practical obstetricians, is, how do these bacteria get in? Are any of them found normally in the genital passages, or do they always get in afresh from the outside? If so, how can their entrance be prevented?

In the earlier stages of bacteriological study, it was supposed that the vagina was a perfect hotbed of bacteria; hence arose the theory of autoinfection. Later and more careful investigations have shown that not only is the healthy uterus absolutely free from pathogenic bacteria, but that the vagina, in a state of health, is equally so, and that nature has provided an elaborate system of defence against the entrance of germs into this canal.

The first argument against autoinfection is the fact, just alluded to, that the vagina is sterile. Döderlein has shown that there exists within the vagina an anërobic bacillus. This bacillus secretes lactic acid, which is antagonistic to staphylococci, and which, within certain limits, destroys them. Experiments have been made of infecting the vagina of a virgin with staphylococcus cultures in large quantities. Within four days, the vagina was found to be entirely free of the injected germs. Döderlein further supported his theory in the following facts:

First, all pathological secretions containing germs are weakly acid or alkaline.

Second, in puerperal women the vaginal bacillus disappears, and in its place are found many kinds of saprophytes, the lochial discharge being alkaline.

Third, when the lochia ceases, the saprophytes disappear, the vaginal bacillus reappears, and the vaginal secretion becomes intensely acid.

Döderlein's conclusions have been challenged, and many further experiments made. J. Whitridge Williams, after a series of very careful observations and a study of the work of other investigators, has shown conclusively that Döderlein is correct, and has pointed out their errors to those who have differed from him. Other experimenters have coincided with Döderlein in their results. Krönig, in 200 examinations, found no pathogenic microörganisms in the vagina. He attributes the sterility of the vagina to the outward flow of the vaginal secretions. Menge thinks that the germicidal action is aided by the anatomical elements of the vagina, by a leucocytosis, due to irritation in the vagina, and a consequent phagocytosis. There are numerous other observations and theories in this interesting subject, but I think we may sum it all up by saying, that the healthy vagina and uterus, either in pregnant or nonpregnant women, are always sterile, and that autoinfection from this source is not possible.

While this may be true of the uterus and vagina, it certainly is not true of the vulva. In an address delivered in 1899, Dr. J. Clifton Edgar has given the results of very careful bacteriological observations made upon the vulvæ of pregnant women. Of thirty cases examined, he sums up the results as follows: The staphylococcus albus was found eight times; s. aureus, three times; streptococcus, once; negative or sterile, nineteen cases. Coli communis was not found at all.

These findings show pyogenic bacteria of the vulvar orifice present in 40 per cent. of the cases examined. These observations are very important; and, while they do not show that there can be an autoinfection—the vagina being imposed as an impassable barrier between the uterus and the vulva—they do show that a source for infection is very close at hand in many cases, and, while this source is on the surface of the body, it is none the less important and is so situated that it can be very readily carried into the deeper tissues. We must remember also that after labor the acid secretion of the vagina disappears, and thus the growth of germs which may have been introduced from the outside is favored. This alkalinity of the lochia is doubtless due to the large amount of blood serum which is poured out, and to the absence of the bacillus vaginæ, which seems to be destroyed at the time of labor.

There are two other arguments which are used against autoinfection: one is the result of douching preliminary to labor. If there are germs in the vagina and they produce the morbidity so common after labor, then preliminary douching with antiseptics should give better results than in cases where the douching is not used. There is an immense amount of clinical evidence pro and con, but the weight of authority is all against the douche. For instance, Leopold used the douche in 5,784 cases; 82.4 per cent. were free from fever during the puerperium. He then treated 4,088 without the douche, and found that 92.2 per cent. were free from fever. Similar statistics might be quoted in much larger numbers, and mostly with the same results.

Still another argument against autoinfection is the results obtained in certain hospitals where great attention is paid to cleanliness and the careful conduct of the labors. If such a thing as autoinfection were possible, then the results obtained in these hospitals would be impossible because a certain proportion of the cases would be infected notwithstanding the greatest care. The following statistics are worthy of consideration on this point: Sloan Maternity, no mortality from sepsis since its foundation. New York Maternity with 1321 cases, no deaths from sepsis. New York Post-Graduate, 850 cases with one death. New York Polyclinic, 450 cases, no deaths. University Hospital, Philadelphia, no deaths in six years. Preston Retreat, 480 cases, no deaths. Boston Lying-in Hospital, 2,194 cases, 1 death.

Having thus disposed of the question of autoinfection, we may consider still further how infection is introduced from without. It must be remembered that infection may be present in the genital tract a long time before labor; then it may spread postpartum, giving an appearance of autoinfection. But this is not a true autoinfection, but rather an external infection which has become latent. What, then, are these latent infections which so antedate labor and cause an extention of infection during the puerperium? Unquestionably, the most common is gonorrhea.

Noeggerath, in 1876, said that 80 per cent. of males had chronic gonorrhea; that 90 per cent. of these were never cured, and could infect. Therefore, of 100 women whose husbands had had gonorrhea, scarcely 10 were well, and the majority were sterile. While there was much truth in this, it was a great deal too strong, and Noeggerath later admitted it.

Sänger agreed with Noeggerath. He claimed that one-ninth of all the disease of the female genitals were due to gonorrhea; that 50 per cent. of these cases had diseases of the tubes and peritoneum, the result of an ascending infection during the puerperium. Sänger later reduced his percentage; but, to show how often it occurred in the puerperium, he examined the pregnant women in the Leipsic Clinic, and found that 26 per cent. of them had gonorrhea. Oppenheimer, in the Heidelberg Clinic, found 27 per cent. of pregnant women had gonorrhea, and 40 per cent. of the children had ophthalmia neonatorum, due to the gonococcus. Lomer, in Berlin, found 28 per cent. of pregnant women to have gonorrhea. Notwithstanding the great numbers of infected women, the mortality in their confinements was small, showing that this form of infection is rarely fatal.

Sänger holds that in these cases there are two processes—either a latent gonorrheal infection, which ascends during the puerperium, and which is caused by a pure culture of the gonococcus; or, secondly, a septic infection added to a previously existing gonorrheal infection. Clinically, he finds that these two processes differ very materially, particularly in the date at which they occur. The pure gonorrheal infection usually shows itself in the third or fourth week, as it takes considerable time to spread; whereas the mixed infection develops soon after labor. It has been shown that the gonococcus can penetrate pavement epithelium; that it is a true pus-producing germ, and can produce peritonitis, and has been found in the peritoneal exudates in pure culture. Pure cultures have also been found in pus-tubes and ovarian abscesses. In ninety cases of pus-tubes where bacteriological examinations were made, 50 per cent. were found to have a pure gonorrheal infection, while in many the gonococcus was present with other germs.

It being admitted that the cervix is the chief seat of gonorrheal infection, and that the pathogenicity of the germs is often of so low a grade that they do not attempt to spread, we can readily understand that the disease would become latent in the cervix and remain there for an indefinite period. This is now generally accepted. After labor the conditions are entirely changed. The lochia afford a good culture medium for the germs, and gradually they spread, until they invade the entire genital tract. They are much milder and slower in their action than are the septic germs, and their spread is usually limited after they reach the peritoneal cavity, by a circumscribed peritonitis. Once they are shut up in a cavity containing pus, they seem to soon die, or at least lose their virulence. While they are milder in their action, the inflammation excited by them, although it may be recovered from more often, tends to become chronic and resist treatment and to recur. This condition is often found in a first pregnancy and results then in the so-called "one-child" sterility.

Having disposed of the question of autoinfection, and explained the cause of latent infection, let us now, for a moment, consider the character of the septic process induced by the different germs. Undoubtedly, one of the commonest results of infection is the so-called sapremia. This is caused by the entrance of saprophytes into the vagina and uterus, and their growth on foreign material which has been left there—such as bits of placenta, membranes and blood clots. These growths are not truly septic in character, do not enter the circulation at all, but produce certain toxins which are absorbed and give rise to various symptoms. While these saprophytes are local in their action, they create a condition which is very apt to be followed by true septic infection, so that, although the condition of sapremia may be quickly and readily recovered from if the septic germs are kept out, should they obtain admission, then a very serious complication arises. Unquestionably, the most virulent germ is the streptococcus, and, unlike the saprophytes, it produces no evidence of decomposition; there is no odor to the discharges, and often very little discharge of any kind. Once introduced into the wounded perineum, cervix or uterine body, it tends to reproduce itself very rapidly, and to travel by the lymphatic route, thus making its way into the deep tissues, into the peritoneum, and inducing general systematic poisoning. The staphylococcus is of a somewhat similar nature, but is not so virulent, and is more readily limited in its action by the walling-off process, either in the tissues or in the peritoneal cavity. The colon bacillus is the least virulent of the three. Sometimes doubt has been thrown upon the nature of the processes induced by this last mentioned germ, but I have recently seen reports of a number of cases of septic infection from which were obtained pure cultures of the colon bacillus.

If, then, puerperal infection is due to the presence of infective bacteria within the genital tract, and if there are in healthy pregnant women no bacteria present in the vagina or cervix uteri, how do the bacteria get in to induce the pathological condition found after labor?

Unquestionably, they may get in from the atmosphere. It has been found that hospital walls, floors and beds may become infected, and that disinfection of these would stop a certain epidemic. Gustav Braun found epidemic influences in Vienna, which he thought were due to fecal matter in a canal which flowed close to the lying-in wards. An epidemic was thought to have been started in the maternity wards at Blackwell's Island, by a liberal application of guano to the lawn around it. So cases have been attributed to the proximity of cesspools, privies, stables, slaughter-houses, open sewers, to pools of stagnant water, and leaking or untrapped waste pipes.

As means of infection, all of these undoubtedly play a very unimportant part as compared with the fingers of the nurse and doctor. It has been shown by bacteriological investigation, that it is almost impossible to thoroughly sterilise the hands. We must also remember the results of investigation of the condition of the vulva. So we may be sure that in the majority of cases the infection is carried in upon the fingers of the doctor or nurse. How the examining fingers become contaminated makes no difference. The germs may be pushed in from the vulva of the parturient woman; they may come from a septic sore on the doctor's person, or from a case of erysipelas, a chronic ulcer—in fact, any source of infection, either in the dead or living body; and especially dangerous are other cases of puerperal septicemia. The dictum of Holmes, said many years ago, but then doubted, is admitted by all as true today: "The disease known as puerperal fever is so far contagious as to be frequently carried from patient to patient by physicians and nurses."

This is a very serious indictment to bring, and should make everybody attending a puerperal case exceedingly careful as to cleanliness of their hands, persons and clothing.

While there can be no doubt of the truth of the statement here made, that infection is introduced by the examining finger more frequently than in any other way, nevertheless, recent observations go to show that certain germs are present in the uterus after labor in a very considerable proportion of cases, whose introduction is apparently not due to the examining finger. In the May number of *Obstetrics*, Dr. Franz, of the University of Halle, shows that germs are often present in the uterine cavity during the normal puerperium. In eighty-one cases out of 300 this was found to be the case. This contradicts Krönig, who says that the cavity of the puerperal uterus is, under normal circumstances, free from germs; the occurrence of microörganisms in this situation is pathologic.

To be sure, most of the germs reported by Franz were saprophytes, very few of them being the true pathogenic germs. In fifty cases of febrile puerperium, thirty-five of which were mild and fifteen severe, Franz found bacteria present in forty-seven. He adopted a new method, cultivating the germs anërobically. His results show that in 69 per cent. of the mild cases of fever in childbed, saprophytes were present; while streptococci were present in 80 per cent. of the severe cases. He assumes, then, that slight elevations of temperature are caused chiefly by saprophytes, while less often in the mild cases we have streptococci and the other pathogenic organisms.

Further, he argued that, if this situation explains the temperature elevation, still the cavity of the uterus must be germ-free in febrile cases. He, therefore, examined ten such cases, and found saprophytes nine times and staphylococci once. Some of his conclusions were as follows:

1. Slight elevations of temperature during the puerperium are usually caused by saprophytes which gain access to the uterine cavity.

2. The saprophytes themselves do not cause fever. It develops only when the outflow of the bacteria-containing secretion is prevented.

3. The saprophytes which are found in the uterus in cases of slight elevation of temperature are probably identical with the saprophytes of the vagina.

These conclusions are interesting, but we have time only for a brief comment upon them at present. It will be noticed that in nearly all the cases the bacteria present in the endometrium were saprophytes. As these are everywhere present in the air, and even in the vagina, according to some observers, and as the normal preventive conditions are absent following labor—the lochia being alkaline and there being much detritus of tissue and blood clots present in it—we can easily understand how these peculiar germs make their way into the uterus during the puerperium. But as they are not pathogenic in themselves, and as the septic germs have been rarely found, this discovery does not take away the responsibility for the introduction of the pathogenic germs by the hands of the attendants.

Time forbids my going into the question of the pathological conditions induced by the presence of the germs. Sufficient to say, that the trouble usually starts as an endometritis, and that the further progress of the disease depends upon the nature of the causative organism. If these be saprophytes, then the disease will probably be localised in the uterus, and the disease shown by a bad-smelling, fetid discharge. If they be streptococci of the virulent type, the endometritis is of very slight importance, the germs rapidly making their way by the lymphatics into the system at large, or into the connective tissue or peritoneum, setting up, as the case may be, an acute septicemia or peritonitis, or, later, a cellulitis, and this followed by a phlebitis or pyemia.

The question of prophylaxis is the most important one. Undoubtedly, cleanliness is here the key to the situation. If the surroundings of the patient, including the atmosphere, are surgically clean; if the vulva is rendered clean at the beginning of the labor, and kept so during its progress; if the hands and the instruments of the obstetrician are equally carefully attended to, then the danger of infection will be reduced to a minimum. If the vagina is normal, as shown by an acid condition of its secretions, the preliminary douche should be avoided. In normal cases, vaginal douches, both before and after labor, do more harm than good. Too frequent examination should also be avoided.

Undoubtedly the use of rubber gloves, or at least of rubber finger cots, will still further reduce the danger of contagion, and their use should become universal.

Now, a few words in regard to some points in diagnosis and treatment. From what has been said, it will be understood that the recognition of the kind of infection is of the utmost importance. If we have to do simply with saprophytes, the treatment will be one thing; if we have streptococci, it will be another. And so with the different germs all along the line.

If there be a mixed infection, then the treatment must be influenced by this fact. Saprophytes and streptococci together in the uterus, might indicate two separate modes of treatment, both to be carried on at the same time.

An accurate diagnosis of every case is possible, especially in the large cities where the city maintains a bacteriological laboratory. The use of Döderlein's tubes will render it possible to have a careful bacteriological investigation made in every case. Whitridge Williams recommends the following plan:

Take a Döderlein tube which consists of a glass-tube 20 to 25 cm. in length and 3 to 4 mm. in diameter, with a slight bend at one end so as to conform to the anteflexed condition of the uterus. It is sterilised either by dry heat or steam, and is then ready for introduction. In practice the most convenient method for sterilising the tube and enabling us to carry it with us in a sterile condition is to place it in a long test-tube of thick glass, which contains at its lower extremity a small amount of cotton, and whose upper end is filled by a cotton plug, just as one closes the ordinary culture tubes which are employed in bacteriology. The lochial tube is then sterilised within the test-tube, and may thus be carried from place to place without fear of contamination.

When we wish to make cultures from the uterus our hands and the external genitalia should be thoroughly disinfected, the patient placed in Sims's position, and a sterilised Sims's or Simon's speculum introduced so as to retract the posterior vaginal wall, then the cervix caught with a sterile volsellum forceps and brought down to the vulva. The vaginal portion of the cervix is then carefully cleansed with a bit of sterilised cotton, and the sterile lochia tube is removed from its tube and introduced into the uterus as high up as it will go, care being taken to avoid touching the external genitals in the operation. To the end of the tube which protrudes from the vulva, a syringe, which draws well, is attached by means of a rubber tube. Suction is made, whereby a certain amount of the uterine contents is drawn up into the tube. The tube is then removed and its ends sealed with sealing-wax, when it can be carried to the laboratory without fear of contamination. On reaching the laboratory it is broken in its middle portion and culture taken from its contents, which we know represent the uncontaminated lochia from the upper part of the uterus.

Having accomplished the first step, we are now in position to act intelligently. If it be a simple endometritis with sapremia, and the condition is due to saprophytes, a thorough cleansing of the uterine cavity should be undertaken. The introduction of the carefully sterilised index finger will tell whether there is any roughness within the uterus, or any bits of placenta or membrane to be removed. If there are, then the curette should be used, with the abortion forceps, so as to make sure that every bit of placenta or membrane is taken out. Then the uterine cavity should be thoroughly irrigated with a mild antiseptic solution, and afterward packed with iodoform gauze.

If the bacteriological examination shows that the endometritis is due to streptococcus or staphylococcus infection, then very little will be accomplished by washing out the uterus, and the indications for the curette are done away with. It must be remembered that the streptococcus travels by the lymphatics. Observations show that it travels 2 cm. in the space of six hours. If, therefore, the disease is twelve hours old, the germ has got beyond the possibility of reaching it with the curette. Antiseptic injections are also perfectly useless, as they probably do not penetrate a single mm. into the tissues. All hopes of intrauterine treatment in streptococcus infection must be abandoned. Curetting in these cases not only does no good, but may do harm, as the reaction zone, which may possibly have grown up in the uterine tissue to resist the progress of the germs, will thus be scraped away and new tissue laid open to invasion. This reaction zone, however, plays a very small and unimportant part in the case of streptococcus invasion, as the progress of the germs is too rapid to allow of its formation.

If the infection be a late one and due to the gonococcus, as this germ travels by surfaces it may possibly be reached before it has gone too far. After it gets into the tubes there is very little chance of stopping its progress; but while within the cervix or the endometrium it may perhaps be stopped. Unquestionably, the use of the new silver compounds is the most rational method of treatment. The uterus can be washed out with a 2 per cent. solution of protargol, and the cavity packed with gauze smeared with Credé's ointment. Washing the uterus with the peroxide may also be useful. As a rule, however, this disease is very insidious, and we will hardly suspect its presence until it has gotten into the tubes or into the peritoneum. It does not often kill, the tendancy being rather to become chronic and to remain limited to the body of the uterus and tubes. The use of unguentum Credé rubbed into the skin would seem to offer prospect of relief. I have myself seen the most remarkable effects from it when used in a gonorrheal arthritis. If the tubes become infected and distended, they can be opened and drained by the cul-de-sac operation, which I shall mention later.

If the streptococcus makes its way so rapidly into the tissues as to be beyond the reach of the curette or the douche, is there any way by which its ravages can be stopped before the entire system is poisoned? A few years ago, Dr. Henrotin, of Chicago, proposed to attack it further on in its course. It is found that when the germ has penetrated the uterus, it accumulates upon the peritoneal surfaces, setting up a peritonitis. A large amount of fibrinous and serous exudate is quickly thrown out, which accumulates in the pelvis and becomes additional culture ground for the germs, which may soon set up a general peritonitis. Henrotin proposed to open the posterior fornix of the vagina into Douglas's cul-de-sac, and to drain away this fluid, at the same time thoroughly exploring with the finger, and then to pack the cul-de-sac with iodoform gauze, thus keeping up the drainage and introducing an efficient antiseptic. This plan has been followed in a number of cases, and is very strongly advocated by W. R. Pryor, who goes so far as to open the cul-de-sac in every case of puerperal infection in which he curettes. If there be a mixed infection—saprophytes and streptococci together, for instance—then Pryor's plan would seem to be a good one.

This operation may also be extended to the opening of recent accumulations of pus within the tubes or broad ligaments. I have opened recently formed pus-tubes in this way with eminently satisfactory results. The opening of the cul-de-sac is a very simple operation; little or no risk is run, and if nothing is found, the wound heals in a very short time. It seems to me to be one of the most important advances, for diagnosis and for treatment, and admits of application to many other than puerperal cases.

Another important question which is now before the profession is as to the propriety of removing the uterus where it is the seat of extensive infection. If it be riddled with abscesses, as is sometimes the case, that would seem to be the only means of effecting a. cure. Authorities differ very much as to the propriety of hysterectomy for puerperal infection. It does not seem yet to be a settled mode of procedure, and the results in general are not very encouraging. Still a few operators have reported favorable statistics, some lives undoubtedly having been saved by this operation. The uterus should be taken out by the vagina, if at all, and the recent distention of the vagina and perineum, with the general relaxation of the parts, makes the operation comparatively easy.

I have thus passed in review some of the principal points in which advances have been made in the study and treatment of puerperal infection. It seems to me that there is great need of reform in this matter in Buffalo. While many practitioners do not see the disease at all, those who do a consulting practice will tell you that it is by no means so rare as is generally supposed. The reports of the Board of Health show that the disease is not by any means unknown; and these results are probably very unreliable, as physicians are apt not to report the true nature of the case when they lose a woman from puerperal infection. I have myself known of cases being reported as typhoid fever, pneumonia and the like.

I have chosen this subject for my address, in order that attention may again be attracted to it. I sincerely trust that in the near future the disease will be treated more scientifically and rationally than it has been in the past. The routine of curetting and douching every case should be given up, and these agencies only employed where the nature of the disease would seem to show that good may be accomplished. Nothing can be done by attacking a disease process which has passed the point of attack. It must be followed up and reached in its deeper lurking places, if any good is to be accomplished. Much remains to be done. The relations of certain bacteria to puerperal infection are not yet fully understood. Until this has been carefully worked out, it will be impossible to lay down a thoroughly rational plan of treatment where these little understood germs are the cause. Mixed infection is also a point demanding more knowledge. The whole subject is certainly worthy of the strongest effort, and one which may well occupy the brightest minds in the profession. There is no disease more important, no disease the study of which offers greater opportunities for success. Prophylaxis, however, must always be the great aim and object; and in the execution of this every practitioner must make himself an adept.

I cannot do better than to close by a quotation from Oliver Wendell Holmes. These sentences are among the best things in medical literature, and he must indeed be hardhearted who cannot yield himself to their influence:

> I have no wish to express any harsh feeling with regard to the painful subject which has come before us. If there are any so far excited by the story of these dreadful events that they ask for some word of indignant remonstrance to show that science does not turn the hearts of its followers into ice or stone, let me remind them that such words have been uttered by those who speak with an authority I could not claim. It is as a lesson rather than as a reproach that I call up the memory of these irreparable errors and wrongs. No tongue can tell the heart-breaking calamity they have caused; they have closed the eyes just opened upon a new world of love and happiness; they have bowed the strength of manhood into the dust; they have cast the helplessness of infancy into the stranger's arms, or bequeathed it, with less cruelty, the death of its dying parent. There is no tone deep enough for regret, and no voice loud enough for warning. The woman about to become a mother, or with her newborn infant upon her bosom, should be the object of trembling care and sympathy wherever she bears her tender burden, or stretches her aching limbs. The very outcast of the streets has pity upon her sister in degradation, when the seal of promised maternity is impressed upon her. The remorseless vengeance of the law brought down upon its victim by a machinery as sure as destiny, is arrested in its fall at a word which reveals her transient claim for mercy. The solemn prayer of the liturgy singles out her sorrows from the multiplied trials of life, to plead for her in the hour of peril. God forbid that any member of the profession to which she trusts her life, doubly precious at that eventful period, should hazard it negligently, unadvisedly, or selfishly!

37 ALLEN STREET.

MODERN TREATMENT OF PROSTATIC HYPERTROPHY.[1]

By HERMAN MYNTER, M. D., Buffalo, N. Y.

AS WE always have the poor with us, so we always have, and will continue to have, with us people with prostatic enlargement. "The days of our years are three score years and ten and if by reason of strength they be four score years, yet is their strength labor and sorrow, for it is soon cut off and we fly away!" Their strength is labor from the inability to empty the bladder, sorrow from the pain, the straining, the sleeplessness, the cystitis and pyelonephritis, resulting from the prostatic hypertrophy and we fly away in misery by uremia. The treatment of this painful disease has long been a snare and a delusion to the average physician. Nothing seems easier and more appropriate than to advise the regular employment of the catheter, when the amount of residual urine becomes so large that the patients walk about with their bladders practically full and are only able to void the overflow. The use of the catheter, however, is in the majority of cases bound to be followed by infection of the bladder, even if we do not consider the difficulties of introducing catheters on account of the irregularities of the prostatic urethra from hypertrophied median and lateral lobes, and the dangers of wounds and false passages from metallic catheters. The result of this infection is that the patients get from the ashes into the fire,—the fire of cystitis, strangury, pain, sleeplessness, hemorrhoids, rectal prolapse, hernia, hemorrhages, and progressive weakness and, emaciation—till, at last, the stinking alkaline urine infects the pelvis of the kidneys and the kidneys themselves, and the dry, furred tongue, the muscular twitchings and the progressive coma show that death from uremia is approaching. Surely, gentlemen, the picture is a sad one to contemplate, for the patient, the family and the physician, and we must hail with gratitude any means by aid of which we may be able to prevent such an outcome.

The prostate develops at puberty and atrophies after castration, showing that it is more a sexual than a urinary organ. Pathologically it has much in common with a fibromyoma of the uterus, particularly when it becomes hypertrophied. Both consist of the same kind of tissues, develop late in life, are apt to atrophy by castration or ovariotomy, or by ligation in the one place of the internal iliac arteries, in the other of the uterine arteries; both may be the subject of similar retrogressive pathological changes, and both may be enucleated bluntly with the finger after splitting the capsule. After the sixtieth year, often earlier, the prostate becomes enlarged to double or even triple of its original size, the hypertrophy being either uniform in the whole organ or affecting the middle lobe or the lateral lobes, or both. The so-called median lobe is the upper posterior part, above the ejaculatory ducts, and is continuous with the lateral lobes, but when enlarged it forms a projection into the bladder, causing the posterior wall of the vesico-urethral opening to become convex. The prostatic urethra is thereby changed both in length and direction in its upper part and micturition and the passage of sounds are interfered with.

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[1] Read before the Buffalo Medical Union, June 27, 1900.

The prostate consists of stroma and glandular tissue, the stroma, according to Gerrish, forming more than three-fourths of the bulk of the normal gland. It consists of connective tissue and smooth muscular fibers and forms a sort of capsule to the prostate. By its outer surface this capsule is in contact and blended with the vesico-rectal fascia and the superior layer of the triangular ligament, while from its inner surface a system of trabecula radiate toward the veru montanum and divide the gland into a number of triangular spaces which lodge the gandular tissue; the glands number thirty or forty and are of the tubular variety. The ejaculatory ducts, three-quarters of an inch long, are formed close to the base and pass downward and forward side by side between the middle and lateral lobes.

It will easily be seen that by enlargement of the lateral or median lobes, separately or altogether, great changes will take place in the caliber, length, direction and curve of the prostatic urethra, which seriously will interfere with micturition and the introduction of instruments. If the lateral lobes be enlarged, the transverse diameter of the prostatic urethra will be lessened and its length increased according to the amount of hypertrophy, in some cases as much as three and a half inches. If the growth be one-sided, the canal will be deflected from its regular course in a lateral direction, the deviation being concave toward the affected side. If the median lobe is particularly affected, the floor of the bladder is lifted up and forms a projection into the bladder, which may become pedunculated and act as a valve, preventing micturition altogether. The upper part of the prostatic urethra curves then around this projection in a forward convex direction, which may prevent the introduction of a metallic catheter, while a double curved Mercier's catheter generally can be introduced. Behind the protruding lobe, and in a less degree in front of it, we frequently find a deep pouch in the bladder containing residual urine. The bladder cannot empty itself completely; the usual funnel-shaped entrance into the urethra is lost and its place taken by this projecting middle lobe, lifting the neck of the bladder upward above the base. The bladder is affected in a different way. If the hypertrophy is confined to one or both lateral lobes, the symptoms are very similar to those of organic stricture and we are apt to find the bladder in a state of concentric hypertrophy, on account of the frequent straining efforts to expell the urine. If the median lobe is chiefly affected and forms a valve-like projection into the bladder, the symptoms are those of more or less perfect retention, the bladder wall is thinned and atrophied, particularly in the pouches behind and in front of the projection, vesical atony is present, with great amount of residual urine.

If both stroma and glandular tissue are increased in their normal proportion, we have a true hypertrophy with an even enlargement and frequently without any serious symptoms. The common form, however, is a hypertrophy of the stroma alone, chiefly of the connective tissue, which forms a fibrous hypertrophy with no tendency to contraction. The glandular tissue is rarely alone affected and the hypertrophy is then less constant, the glandular tissue gradually disappearing and being replaced by a fibrous growth of greater density. That the hypertrophy may appear in the shape of simple tumor formation and confined to no particular portion of the gland is well known. Their importance depend upon the obstruction to the micturition, they produce. No treatment beside surgical extirpation is of any avail in these tumor formations. The hypertrophies proper, however, may be influenced by different surgical procedures, the results being better in the cases in which the hypertrophy is limited to the connective tissue or in which this greatly preponderates. The *symptoms* depend upon the obstruction to the passage of urine and secondarily upon inflammation of the bladder and upper urinary tract, brought about principally by the use of dirty instruments. On account of the straining we meet complications with hemorrhoids, hernia, hemorrhage, stone, rectal prolapse, and the like. In regard to *diagnosis* it is of importance to decide the character of the hypertrophy, its seat, extent and the presence of a complicating inflammation of the bladder and kidneys and its degree. A soft elastic swelling, felt by rectal palpation, indicates an excess of glandular tissue; a hard, often irregular and nodulated, swelling a preponderance of connective and fibrous tissue.

In hypertrophy of both lateral lobes the catheter is generally introduced with comparative ease, but the prostatic urethra is lengthened.

In unilateral hypertrophy, the tip of the catheter is deflected to the opposite side of the hypertrophied lobe. In hypertrophy of the middle lobe it may be difficult or impossible to introduce a metallic catheter, without, at least, greatly depressing the outer end of the instrument, in order to have the top surmount the inner projection, and we meet a great amount of residual urine. A Mercier's catheter with double curve will often enter the bladder with surprising ease, where it has been impossible to introduce a metallic catheter. Cystoscopic examination is of importance in order to study the form of the projection. In regard to treatment, it may safely be stated that as the symptoms depend upon the obstruction to the passage of urine, no treatment will be of any permanent use unless it provides, in some way or other, for the removal of the obstruction. I shall not therefore waste your time in discussing the various remedies and methods which have been supposed to exert some influence upon this hypertrophy, such as ergot, icthyol, iodides, etc., a mechanical treatment by dilatation, rectal massage and injections, all of which, at best, only mitigate the early symptoms or an additional engorgement.

The purely surgical treatment may be used for the purpose of producing shrinkage of the gland, by ligating the internal iliac arteries, by castration or by vasectomy, or—for the purpose of removing the obstruction partly or altogether—by prostatotomy, including Bottini's operation, or by prostatectomy in a more general hypertrophy, when the patient's condition still allows such an operation, or lastly, where neither seems indicated, for the purpose of relieving the patient from his continued miseries by establishing a suprapubic fistula.

Castration, introduced by White, of Philadelphia, in 1893, has proved itself to be a reliable and curative operation. I have performed it in about a dozen cases and the patients have all gradually been improved and relieved of their urinary troubles. I have seen none of the sudden improvements mentioned by different authors. The improvement has in every case been slow and it has taken months to accomplish the shrinkage. The operation seems to have most effect in cases with hypertrophy of muscular and glandular tissue; in short, in cases in which the prostate feels soft and evenly swollen by rectal palpation. The mortality, however, is given at about 10 per cent, and improvement has been noted in about 94 per cent. of the cases who survived the operation. The power of the bladder returned in 66 per cent. with disappearance of the cystitis. The authors differ in regard to the mental disturbances frequently observed after castration in old men, some calling it acute mania, others traumatic delirium or uremia. None of my cases have suffered from it and none have died as the result of the castration.

Vasectomy has been recommended as a substitute for castration, on the supposition that it would result in atrophy of the testes and secondarily in atrophy of the prostate, and that without unsexing the patients. In my hands, this operation has had no effect upon the size of the prostate. Wood states that while the testes did not atrophy, a slowly progressive shrinkage of the prostate did take place. Reginald Harrison[1] considers vasectomy especially effectual in the early stages of prostatic enlargement by effecting shrinkage, but that prostatectomy is preferable in cases in which the prostate has assumed the form and structure of fibrous growth and the obstruction warrants other measures than catheterism. He believes that the shrinkage following vasectomy may do good in making it easier to introduce the catheter and in removing spasms, pain and hemorrhage, although he considers it impossible to restore the natural function of the bladder in cases in which secondary changes, such as sacs, pouches or trabeculation, have taken place in the bladder. I am free to state that I have seen no effect whatever of vasectomy upon the size of the prostate or upon the symptoms.

Ligation of the internal iliac arteries has been recommended and performed a few times by Willy Meyer, of New York, and apparently with good success. It is, however, a formidable operation, difficult to perform and not without great danger in old and feeble patients.

Prostatotomy, to which belongs Bottini's electro-caustic operation, is only indicated in hypertrophy of the middle lobe. It means the division of the projection or bar at the neck of the bladder by aid of special instruments introduced through the urethra or after external urethrotomy, and the operation is apt to be followed by severe hemorrhage and infection. The success of the operation is probably more due to the continuous drainage after the operation than to the operation itself. The operation is a makeshift, at best, and is only suited to those cases in which cystitis has gradually become acute and the passage of instruments difficult and in which no other operation is allowed. Occasionally, by sheer luck, it may be possible through the perineal wound to diagnosticate and remove a projecting, pedunculated median lobe and so give permanent relief.

Bottini's operation, introduced in 1875 and later, in 1897, greatly improved by Freudenberg, of Berlin, is not without danger and its usefulness is limited to cases with a median projection. Severe hemorrhage is apt to occur and has occurred, a large and expensive apparatus is required and it demands a manual dexterity which only exceptionally is found. The last statistics of 229 cases, shows 57.5 per cent. cures, 26 per cent. improvements, 13 per cent. without results and 8 per cent. deaths. In a number of cases, besides, the cures or improvements were not permanent.

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[1] Medical Fortnightly (St. Louis), May 25, 1900.

The most modern operation is prostatectomy; the enucleation of the hyperthrophied middle and lateral lobes through a perineal incision, combined with, and preceded by, a suprapubic cystotomy, through which two fingers are introduced into the bladder and the prostate crowded down towards the perineum. This operation which bears Alexander's name, is performed in the following way: After preliminary suprapubic cystotomy a grooved stone sound is introduced into the bladder through the urethra, with the patient in the lithotomy position, the membranous urethra is incised by a median incision, reaching from the bulbus urethra to just in front of the anus and including the tip of the prostate. The staff is now removed and while the prostate is being crowded downward with two fingers in the bladder, the second finger of the right hand is introduced through the perineal incision, the fibrous sheath of the prostate is broken into by the finger, the capsule entered and the hypertrophied lobes enucleated bluntly with the finger. Drainage is thereafter established, both through the suprapubic and the perineal incision, for about a week. The suprapubic cystotomy may be necessary in certain patients with large abdomens, but is, of course, a serious complication in old people. Parker Syms[1] has therefore proposed to open the abdominal cavity above the symphysis and introduce the hand and press the prostate down through the intact bladder wall. His argument, of course, is that such a laparatomy with proper precautions is without danger.

Johnson[2] has modified this idea by simply making a suprapubic incision without opening either the bladder or the peritoneum and through this incision press the prostate downward. I believe that even this incision is unnecessary and that the operation can be performed without any suprapubic incision at all, as I in a recent case in a large and heavy man, during the anesthesia discovered that I could press the prostate downward with great force by bi-manual examination, one finger being in the rectum and the other hand pressing down above the symphysis. I was able in that way to palpate the upper margin of the greatly enlarged prostate. To make the operation easier, and better to expose the prostate, I, having previously introduced a stone sound, let the posterior part of the median incision curve around the anterior half of the anus on both sides, dissected loose the whole anterior part of the ampulla of the rectum, exposed the prostate to sight, incised the capsule in the middle line, but without opening the urethra, and through this incision enucleated with ease both hypertrophied lateral and median lobes. The prostatic urethra was, however, torn during the process of enucleation and through this opening, I therefore, introduced a large drain and kept it there for seven days. The patient, a large fleshy man, 67 years of age, has so far been doing well. Before the operation he was forced to pass water day and night every hour and a half and had considerable cystitis. He was operated on June 15th and is today, July 8th, out of bed; can keep his water four hours, his cystitis is rapidly improving and I confidently expect a perfect recovery. The weight of the enucleated lobes were $2\frac{3}{4}$ ℥ or 88 grams, a weight that sufficiently shows the enormous size of the prostate. How far it is possible to perform this operation without tearing the urethra, I am not prepared to state. It was torn in my case and therefore I drained. I kept, however, a large grooved stone sound in the urethra during the operation and the urethra was torn inside the prostate by the contact of the finger with its rather sharp edge. I believe this accident can be avoided by using simply a Mercier's catheter, instead of a stone sound. It is firm and hard enough to locate the urethra with the finger inside the capsule of the prostate. One thing, however, I am prepared to state: that it is not necessary to make the suprapubic cystotomy which, at best, is a serious complication.

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[1] Annals of Surgery, March, 1899.

[2] Annals of Surgery, June, 1900.

Alexander has twice performed this operation on very thin subjects without suprapubic cystotomy. My patient, however, was a large and fleshy man and the operation was, nevertheless, done with ease without cystotomy. He had two years previously been submitted to vasectomy, but without any benefit. He had arrived at the time when he was obliged to empty, or rather try to empty, his bladder every hour and a half night and day; he had considerable cystitis from using catheters and he was willing to submit to any operation that promised relief. I advised, therefore, a radical operation, a la Alexander, but avoiding the serious complication of supra pubic cystotomy. With a Mercier's catheter in the bladder instead of a grooved stone sound, I feel confident I could have avoided the tear in the urethra, and we would then have an ideal operation with the bladder and the urethra intact and a simple wound in the prostate, which would only keep the patient in bed for a couple of days and soon would heal by granulation.

My belief is that this modification of Alexander's operation will become the operation of preference in the future and be performed early, when the symptoms of obstruction commence to develop and before the bladder and the kidneys have become involved.

566 DELAWARE AVENUE.

THE EARLY AND THE LATE OPERATIONS FOR APPENDICITIS.[1]

BY EUGENE A. SMITH, M. D., Buffalo, N. Y.

APPENDICITIS in the last several years has been in print so often before the public as well as before the medical profession, discussed by both laymen and professional men, that an apology is hereby tendered for presenting so hackneyed a subject before this association. While all agree on the insidious nature of the disease in its development, the violence of its onset and its gravity in the more serious forms, there are many views as to its pathology and prognosis, and there are two views as to treatment which may be classed as the operative and the nonoperative or medical. It has numerous forms or types, its progress is uncertain, its complications are many and its terminations varied. It is not surprising, therefore, that our knowledge of this subject is not yet crystallised into definite rules for our guidance in treatment, based on a definite pathology and consequent prognosis. Daily, however, our statistics increase and from the voluminous writings on the subject we can make more certain conclusions, and hold out to the victim of this disease better and better prospects of recovery along well-defined lines of treatment. That the majority of medical men lean strongly to the operative treatment of appendicitis is not to be denied. Believing in an infection in the appendix as the exciting cause of the diseased processes which ensue, be the predisposing cause any one of several, such as traumatism, foreign body, fecal concrement, bends or twists of the appendix, deficient blood supply, gastroenteritis, colitis and salpingitis and ovaritis extending to the appendix, it is a fact that operative removal of the focus of trouble is the essential element in treatment. This paper can not appeal to men who believe in a vague inflammatory condition in the right lower quadrant of the abdomen, known as perityphlitis or paratyphlitis. They must first become schooled in the pathological teaching that shows the reasonableness of infection and inflammation in the useless blind pouch, rich in lymphoid tissue and prone to inflame, known as the appendix vermiformis. The same teaching points to the rarity of cecal traumatism and ulcer as a cause for retrocecal cellulitis and pus formation, which pus when gathered gives the name perityphlitic or retrocecal, or pelvic, or perinephritic abscess, variously so-called by the older writers.

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[1] Read before the Lake Erie Medical Society, June 29, 1900.

We may now subdivide the class of men who believe in the operative treatment of appendicitis into subclasses, the two principal ones comprising those who operate early and prescribe medically afterward; second, those who treat by internal medication first, and operate late if they operate at all, being compelled so to do by developments that are only to be treated surgically, such as pus formation or obstruction of the bowel. A subdivision of this latter class comprises those who treat the patient during an attack of appendicitis expectantly with a view to operate in the interval after subsidence of inflammation, before a new attack develops. Other subdivisions could be mentioned. Some men say they never operate, never finding it necessary to do so. They are untruthful, or they are self-deceived and are the most unsafe men to whom patients suffering with this disease can entrust themselves. Another class to be mentioned is composed of men who send a dose or several doses of morphine to patients having colic with cramps and vomiting on the diagnosis made by some friend or relative of the patient, and, who, upon visiting the patient a day or two later occasionally find a patient dying with peritonitis following perforative or gangrenous appendicitis.

Beginning with June 1, 1899, and ending with June 1, 1900, I have seen forty-six cases of appendicitis in consultation with the attending physicians, thirty in number. Some of these men have a large practice and nine of them have called on me for surgical help on two occasions in such cases; two of them calling me three times. Of these cases, ten were not operated upon; in nine cases, because the attack was mild and the patients chose to await the subsidence of inflammation for an interval operation. It is of interest to note that only one of them has so far come for operation, and in this case it was because a new attack developed. In the tenth case the father of the patient declined operation for his son, a boy of 17, because another son had died of this disease after operation. This boy also died after two weeks of suffering, the father stubbornly refusing operative help. Beyond doubt some of the medical men who called me for severe cases, have carried milder cases through without consultation or operation, and some may have called other surgeons in some of their cases, or may have failed to diagnosticate some mild cases of appendicitis under their observation. It can not therefore be said that these cases represent all the experience in appendicitis of thirty physicians for one year, but it can be said that these cases represent 90 per cent. of the cases that twenty of these men have had in one year. Again, it must be allowed that not all of the thirty-six cases operated upon would have died without operation. Some of the early cases operated upon would have been successfully treated by morphine or by cathartics beyond a doubt, as far as subsidence of acute inflammation in the attack under consideration is concerned. I venture to assert, however, that no one of them would take back his appendix for a chance to be where he was before its removal. Of those who died, no one, so far as surgical judgment can determine, would have recovered without operation.

Month.	No operation.	Operation.			Drainage for Pus.	Result.	Complications and Sequelæ all in Late Cases.
		Interval Cases.	Early Cases.	Late Cases.			
1899.							
June	1	......	......	1	1	1 death (non-op. case). Recovery.	Fecal fistula, since healed.
July	......	......	......	1	1	"	Fecal fistula, since healed.
August	......	......	......	1	1	"	Hernia (one).
September	2	......	1	......	1 early.	"	
October	......	1	1	1	1 late.	"	
November	2	......	......	3	3	"	Cystitis. Broncho-pneumonia. Hernia.
December	1	......	......	2	2	1 death.	
1900.							
January	......	......	......	1	1	Recovery.	Hernia.
February	3	......	......	2	2	2 deaths.	
March	......	......	1	5	5 late.	Recovery.	Cystitis. Broncho-pneumonia, 2 cases.
April	......	1	1	4	4 late. 1 interval.	1 death (late).	Fecal fistula (one not yet healed).
May	1	1	3	5	5 late.	Recovery.	Broncho-pneumonia and nephritis.
	10	3	7	26	28		

All late cases needed drainage. One death without operation. Four deaths after operation, all late cases.

By reference to the table here printed and upon analysing these cases there is a striking difference to be seen in the steps of the operative treatment, in the complications, in the sequelæ and in the prognosis between cases operated upon early or in the first seventy-two hours, and those operated upon later than the third day or after seventy-two hours. It is of course an arbitrary division as to time, when we call cases operated upon before the fourth day early cases, but it fairly serves a purpose as regards prognosis for the majority of cases. In many slowly developing subacute cases an early operation is possible at the end of a week or even two weeks. On the other hand, fulminating perforative or gangrenous cases with spreading general peritonitis are late cases at the end of twenty-four hours from their first clinical manifestations.

Many operators use the term late-early cases for patients in the second and third day of the disease, depending on the severity of the case, and early-late cases for those in the fourth, fifth, sixth or seventh day, again depending on the nature of the case; here especially depending on the amount and the location of pus. In explanation of these distinctions it may be said a fulminating case is already late from the operative view-point of good prognosis if the disease is two days old, yet it is an early case according to time. So again an acute case with adhesions walling in a small pocket of pus is a late-early case for a safe operation on the fouth day, becoming more and more a late case as the abscess enlarges. It is in this class of cases that operators are now warmly arguing, as to the advisability of searching for the appendix and removing it, making the so-called complete operation, or of evacuating pus without removing the appendix, making in many cases a far easier and safer, but incomplete operation.

In this latter class it is later necessary to remove the appendix or to leave the patient in danger of another attack of appendicitis. This has occurred in two of the series of cases submitted in this paper. One was a boy of five years and three months old, from whom I removed a perforated appendix on the second day of a second attack, a large pelvic abscess having been evacuated by Dr. Mynter about one year before, when the boy was four years and four months old. In the second case the patient was a boy of nine years and had a relapse of appendicitis, requiring an appendectomy two weeks after evacuation of a large pelvic abscess, due to his first attack of appendicitis.

It is a fact that obliteration of the appendix may occur through repeated attacks of inflammation, but this necessarily occurs in only a small proportion of cases, so small in fact that it can not be counted in considering prognosis. Again, a very few cases of first attacks of appendicitis are not followed by later attacks, but again the proportion of such cases is too uncertain to apply to a case in hand to be considered in prognosis as a safe outcome for the patient.

When abscess forms after appendicitis and perforation due to the sloughing out of a fecal concrement or foreign body occurs it is possible for spontaneous cure to follow if the pus breaks into bowel, bladder or vagina, or onto the surface in the groin, or, if retrocecal, in the loin. Second attacks may occur in this class of cases, except in a small proportion in which walling by adhesions of proximal good appendix occurs and sloughing and exfoliation of the portion distal to a concrement or stricture occurs. In this class of cases occur a large number of fecal fistulæ more or less slow to close, dangerous, extremely disagreeable, and eminently unsatisfactory to treat.

When we now turn to the question of operative work for appendicitis, what are the reasons for and against early operation? In favor are results, which in good hands are said to be over 90 per cent. of recoveries, if done early or in the interval. In ten interval cases, I have had no deaths. In one of the three cases, in the table of cases here reported, the patient had had several severe attacks and some less severe ones, making thirteen attacks in less than a year. He came from Dundas, Canada, no positive diagnosis having been made, with a mass in the right iliac fossa, from which I removed a broken down appendix. I judged it best to drain because of the excessive amount of inflammatory new formation. His was the only interval case I have ever drained. Reference to the table shows no mortality in seven early cases before pus formation in which no drainage was used.

Dread of operation and danger of anesthetic being overcome and operation completed, moderate pain, occasional hiccoughing, some troublesome constipation, moderate fever, occasional stitch or wound suppuration, a brief afterperiod of colicy pain due to adhesions and vague dyspeptic conditions for a few weeks or months sum up the post-operative discomforts. In no one of these two classes of interval and early cases has rupture in the line of incision thus far occurred.

Against operation may be mentioned the danger due to it, post-operative suffering, hernia, and the mortality already given, which is less than 10 per cent. according to the most unfavorable figures. That there is no danger in operation I do not believe. An occasional case with adhesions, or pocketed pus due to one or more attacks of appendicitis, may cause fatal complications from shock, hemorrhage, sepsis or obstruction of the bowel. When, however, we compare this mortality with that of unoperated cases, we find the most favorable statistics pointing to 20 to 40 per cent. of deaths in 100 cases, granting that 60 to 80 recover from a first attack. As regards suffering it is enough to say it does not compare with that endured by patients not operated upon. Unoperated cases must be more or less constantly and completely narcotised with morphine, which drug may be judiciously used in far smaller quantities in operated cases to control suffering with far better satisfaction to patient and attendant. As regards hernia, no one will claim any comparison between early and late cases in this respect. Late operation with drainage in a large proportion results in formation of hernia in the longer line of cicatricial tissue, at least partly closed by granulating tissue in the healing process. In a clean incision, neatly approximated in early cases, hernia should be and is extremely rare.

If we now consider appendicitis from the standpoint of the men who delay, we enter upon a wide field of the complications occurring with and following appendicitis.

To begin with, late operators lose all of the fulminating cases of gangrenous and perforative appendicitis, and those with general peritonitis, or they may save a small proportion of them by precarious work in the nick of time by a late-early operation. Possibly 60 to 80 per cent. of first attacks subside without pus formation, but out of this number 30 to 50 per cent. will have a second attack, and in due time of the remainder an unknown percentage will have a third and then a fourth attack and each time a small percentage will have a dangerous form and require operation or they will die. It is needless to say operators recognise that with each new attack, complications from adhesions are more frequent and liability to sepsis and danger of bowel obstruction are more pronounced.

In the 20 to 40 per cent. of cases of first attack, in which sepsis plays a part to the extent of pus formation, the delayed operation is sure to be done through a longer incision than in early operation, owing to the adhesions which form. Healing in these cases is prolonged from two weeks in early operation to three, six or eight weeks in late operation, and, moreover, patients are emaciated, anemic and weak for weeks and months afterward.

With pus formation, metal tube or gauze drainage must be employed. For these reasons hernia in the line of the incision is often seen. In the twenty-two cases operated upon and drained for large pus collections, or drained after washing out the peritoneal cavity and pelvis for sero-purulent forms of peritonitis with no limiting adhesions, I now have three cases of hernia for the relief of which my patients are obliged to wear a bandage of the ventral hernia truss pattern. It is still too early to say that several more in this series may not develop hernia.

Infection elsewhere and pus collections due to metastasis or to spread of inflammation by continuity or contiguity are likely to occur in delayed cases. One case had retrocecal abscess two weeks following a pelvic abscess present when the perforated appendix was removed and a fecal concrement found. Fully three weeks later another abscess, due to spread of sepsis in cellular tissue was found and opened above the liver and below the diaphragm, and here a second fecal concrement, plainly from the appendix, removed seven weeks before, was washed out in the pus. Following one septic case, in a young girl, a large parotid gland abscess developed in the second week and was opened, the patient thereafter doing well excepting that she made a slow recovery from a facial paralysis owing to involvement of the facial nerve. Other sequelæ of cases coming late for operation of the nature of metastatic infection or of secondary infection owing to lowered vitality, are two cases of broncho-pneumonia, one case of erysipelas, first appearing around the wound and then on the face spreading to the scalp, two of cystitis, probably due to catheterisation, and one of acute nephritis with broncho-pneumonia and pleurisy.

It is in this class of cases, also, that dangerous adhesions producing bowel obstruction are most frequently seen. I lost one such case. This man had a long illness, finally getting over a first attack sufficiently to attend to his legal work, but he died of obstruction of the bowel and peritonitis, after operation for a second attack in which the appendix became gangrenous.

Of fecal fistula, I have records of three cases, all occurring either with or without operation in late cases. One was a case of spontaneous opening of an appendicular abscess just above Poupart's ligament. The other two followed drainage of the iliac fossa after amputation by circular ligature of a gangrenous appendix.

In summing up I find in ten cases of appendicitis not operated upon that one died. In thirty-six cases operated upon, four died. In ten interval and early cases none died. Four died of the twenty-five late cases, one from pylephlebitis, one from obstruction of the bowel and peritonitis, one from general peritonitis which was present at the time of operation, and one from localised pus formation in the infrahepatic and perisplenic tissues with general peritonitis, pus having been free in the peritoneal cavity at the time of the operation.

In conclusion, I urge all medical men to join the class of early operators. Do not wait for the interval. In one hundred cases you will lose a certain number by so doing. Authorities differ on the number, but the figures range from 5 to 40 per cent. of deaths. In this paper I have purposely used percentages in wide ranges, because authorities do not agree and my own statistics are still too small for general conclusions. One man may see case after case of subacute appendicitis recover from the attack without operation, and then see several fulminating cases with an equal percentage of mortality under the same treatment. Surgery fails in some cases, but beyond the possibility of a doubt, the removal of the cause is certainly a safer procedure in appendicitis than is medical treatment with surgery held in the background as a reserve to be called upon to cover the retreat when the battle is lost.

1018 MAIN STREET.

THE SYMPTOMATOLOGY OF EARLY ECTOPIC GESTATION.

By MAUD J. FRYE, M. D., Buffalo, N. Y.

I WAS fortunate enough not long ago to see in my own practice two cases of early ectopic gestation occurring within a few weeks of each other. I should not venture to offer to this association a paper founded on such a limited personal experience of a condition no longer regarded as rare, but for the contrast in symptoms which the patients presented both before and after rupture. With the belief that on this account a report of these cases will be interesting, if not instructive, I present such report to you:

Mrs. A., married, aged 23, mother of one child, about two years of age, first came under my care February 8, 1900. She was a slender, delicate, anemic woman. Her general history was fair, except for an illness the previous fall, diagnosticated inflammation of the bowels by her attending physician. Her menstruation was usually regular. She had missed the period due January 26th and was suffering with pain, such as accompanies early abortion. Examination showed a retroverted, somewhat enlarged uterus, the os patulous, the cervix not so soft as in normal pregnancy. No tubal swelling was

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1. Read at the twenty-fifth annual meeting of the Alumni Association of the Medical Department of the University of Buffalo, April 27, 1900.

discovered, possibly because I believed that I was dealing with a normal uterine pregnancy and did not look for any. Long years of experience are necessary to overcome the tendency to find and diagnosticate the condition one has in mind—an illustration of the influence mind has over matter. The patient was kept in bed and given viburnum and the pains promptly subsided. There was no discharge of blood or of decidual tissue. On February 16th, eight days later, about 8 a.m., Mrs. A. was seized with sharp and severe pains in the lower part of the abdomen, chiefly on the right side. There was also tenderness on the right side of the abdomen. The pulse was rather weak, but not frequent. The patient volunteered the information that she had had repeated similar attacks in months gone by, a statement which did not aid the diagnosis. The pain passed off and did not return until about 11 p.m. At one o'clock on the morning of the 17th, I found the patient profoundly anemic; pulse, 150, and barely perceptible, great pain in the abdomen, thirst, and the other usual symptoms of internal hemorrhage. Vaginal examination showed fulness to the right of the uterus. The diagnosis of ruptured tubal pregnancy was concurred in by Dr. Frederick and the patient was at once removed to the Woman's Hospital, where, at 4 a.m., abdominal section was done and the ruptured tube removed. The abdominal cavity was filled with blood.

Although in a precarious condition when the operation was finished the patient promptly rallied and made an uneventful recovery. It is interesting to note that the unimpregnated tube was so diseased as to be functionless and it was therefore removed. Inflammation of the bowels in the case probably meant pelvic peritonitis.

Mrs. B., aged 21, I saw for the first time February 9, 1900; she was a thin, anemic woman, married eighteen months; had never been pregnant. Shortly after marriage she suffered from an attack of pelvic peritonitis, gonorrheal in origin. She had never been well since, having attacks of pelvic pain of greater or less severity at frequent intervals. For the past few weeks she had been suffering rather more pain than usual. Her menses were regular. The whole pelvis was very tender and an examination therefore somewhat unsatisfactory. Some thickening of the structures to the left side of the uterus could be made out and a mass to the right. The uterus itself was hard and not large. A diagnosis of chronic salpingitis, possibly of tubal abscess, was made and an operation advised. On March 6th last this was done at the Woman's Hospital by Dr. Frederick.

Instead of the expected pyosalpinx a ruptured tubal pregnancy was found upon the right side, with a chronic catarrhal salpingitis on the left. The amount of blood was approximately a pint, clotted and walled off, with some fluid blood, the condition evidently the result of slow hemorrhage. The patient had presented none of the usual and expected signs of tubal pregnancy, either before or after rupture, except a long continued sero-sanguinolent flow at her last menstrual period, the significance of which was not appreciated until the abdominal cavity was opened. She had not had more pain than she had frequently suffered from in previous months, nor was it different in character. No menstrual period had recently been missed. If any shreds of decidual tissue had been passed the patient had not observed them. A most careful and repeated cross-examination of the patient after her recovery from operation failed to discover the symptoms which usually accompany tubal pregnancy before and after rupture. Only once had she thought herself pregnant, in June, 1899, when her menstruation was delayed three or four days. Her pulse frequently observed for some weeks before she entered the hospital was never above eighty.

The chief symptoms of ectopic pregnancy before rupture are usually stated as being irregular menstruation, pelvic pain, and the presence of a tumor outside the uterus, or expanded somewhat: Tubal swelling and enlargement of the uterus, associated with suppression of the menses often followed, after a brief period, by sero-sanguinolent discharges and increased flow at the menstrual period with paroxysmal pains, radiating from the side of the pelvis upon which the affected tube is situated, and with the expulsion of uterine decidua at the end of the second or in the course of the third month. These symptoms and physical signs are not always present. In the first case reported, there were no symptoms until the very day of rupture, indicative of ectopic gestation. A more thorough examination when the patient was first seen might have aroused the suspicion of extra-uterine pregnancy and led to correct diagnosis before rupture with serious hemorrhage had occurred. Yet I have seen operated upon for tubal abortion a patient whom a far abler physician than myself had, but a short time before, carefully examined under anesthesia with the possibility of extrauterine pregnancy in mind without discovering the tubal gestation, which later operation showed to have then been present.

In the case of Mrs. B., the character of the discharge was the only symptom presented which might have drawn attention to the true nature of her ailment. The American Text-book of Gynecology, says:

> The condition most likely to be confused with an ectopic gestation is probably a tube distended with serum or pus, especially the latter. The physical signs of the two conditions prior to rupture often closely resemble one another. The chief point in their differentiation is the difference in their clinical history.

In this case there was no history looking toward pregnancy. Not only is it easy to fail to diagnosticate a tubal pregnancy when it is present; it is not impossible to diagnosticate a non-existent ectopic gestation. For example, Mrs. X. skipped one menstrual period, shortly after she began to have pain on the right side of the pelvis, one attack being especially severe. The uterus was slightly enlarged; there was a small swelling to the right of the uterus. Diagnosis, tubal pregnancy. Section showed a uterine pregnancy with a small cyst of the right ovary.

It is more especially to the symptoms following rather than preceding rupture, that I wish to call your attention. My first patient presented the classical and commonly accepted picture of tubal pregnancy with intraperitoneal rupture, viz.: yawning, languor, faintness, thirst, clammy perspiration, rapid pulse, intermittent vomiting, and acute anemia. The second, with a considerable amount of blood in the peritoneal cavity, had presented no symptoms at all pointing to internal hemorrhage.

Including the cases herewith reported, I have seen seventeen operations in which ruptured tubal pregnancy was found, usually when it was the condition operated for, sometimes when it had been unsuspected. In three the rupture was subperitoneal. Of the remaining fourteen, in which rupture into the peritoneal cavity had occurred, only three were emergency cases, presenting the grave symptoms of internal hemorrhage, which demand immediate surgical interference. The conclusion toward which these few cases point may be stated in the following paragraph quoted from Lusk, in Keating and Coe's Gynecology:

> Even when rupture takes place the hemorrhage is not necessarily fatal. Mr. Tait insists on the relative harmlessness of most cases of hematoma, due to rupture occurring between the folds of the broad ligament; while the records of celiotomy show that, even with intraperitoneal rupture, the hemorrhage has often been moderate in amount, and did not in itself furnish the occasion for surgical interference.

224 ALLEN STREET.

DISCUSSION OF DR. FRYE'S PAPER.

Dr. C. C. Frederick: I take particular pleasure in discussing this paper, as I happened to see the two cases cited by Dr. Frye. I think the deductions she has drawn, and the lessons taught by the differing symptoms, and unlike conditions exhibited by these two patients are very worthy of consideration. This matter of ectopic pregnancy is a very important one, because it occurs very frequently, much oftener than we were taught to believe in the past. It used to be considered one of the rarest occurrences; now it is not at all rare. In the past few years I have several times operated on as many as three or four in one month—in fact, two or three months ago I operated on four in one week; but, of course, they are likely to appear in schools. But it is of very frequent occurrence, and consequently should be taken into consideration when a woman has pain and symptoms of internal hemorrhage. For instance, four or five years ago I was called to see a case, a woman in most serious condition, absolutely pulseless and blanched. The physician had been with her nearly all day long—over twelve hours—administering all sorts of restoratives, but had never thought of the possibility of ectopic gestation. She died before anything could be done; and after death two pailfuls of clotted blood were removed from her abdomen.

The fact stated by Dr. Frye is very pertinent and true, that a vast majority of instances of rupture are not cases for emergency operation. It is but a small proportion of cases where rupture demands an immediate operation, that is for acute anemia following the rupture; they are exceptional cases, the majority being slow bleeding, with recurrence of hemorrhage possible. It starts in, the patient becomes faint and as a result of lowering arterial tension clots form and the bleeding ceases; the patient rallies, and in a day or two, as the tension rises, there may be another hemorrhage. They may last for days or even weeks. I operated on a case two years ago where rupture had occurred about the second month. It had gone on growing subperitoneal; there had been recurrent hemorrhages until there was a tumor as large as a full term pregnancy—all subperitoneal, the whole abdominal contents lifted up by concentric layers of blood clots—and she had had a hemorrhage only a few days before, indicated by a fresh clot found. The fetus had developed until about the sixth month and then died.

In those cases that do have acute anemia, coming on rapidly after rupture, immediate operation should be done, even though the patient be absolutely pulseless, because you can never hope to accomplish anything by waiting. Fill them up with salt solution, go into the abdominal cavity, get hold of the bleeding point and stop it—then trust to luck.

Then, again, there is the other class of cases, and I have operated on several, where I had classical symptoms, and on going into the abdomen found no pregnancy. I have done that three or four times, and am quite willing to confess it. And I think that it has occurred to me about an equal number of times to go into the abdomen, thinking I had something else, and find a ruptured tubal pregnancy.

Dr. **Charles A. L. Reed**, of Cincinnati, O.—This subject is one about which it is difficult to keep silent when it is under discussion. I have been much interested, particularly in some diagnostic points which it raises. I shall not soon forget the dictum of Mr. Lawson Tait, as I used to hear him thunder it forth, that "it is impossible to diagnosticate ectopic pregnancy before rupture." Repeated experiences by numerous observers have broken the force of this dogmatic assertion, as most dogmatisms are more or less destroyed by the accumulated experience of the profession. I have myself made the diagnosis before rupture, and have operated before rupture; I have been called to operate in the practice of other people who have made the diagnosis before rupture, and have removed the specimen. Therefore the observations which I have made personally are only those which have occurred in the hands of other specialists, and in the hands of general practitioners, who are today the most acute students of the symptomatology of disease.

Now, this being true, I may be called upon in the light of the paper which has just been presented, and the remarks of my friend, Dr. Frederick, to define my practice, because I operated before there was a rupture, and not under menace of exsanguination and immediate death from bleeding; but I operated on the strength of the diagnosis, simply because I did not feel that it was well for the life of any woman to be walking around with a dynamite bomb in her, that may explode at any moment. That has been the key-note to my practice in these cases. I have never thought it safe to leave an ectopic pregnancy in situ, bleeding much or little, particularly if bleeding much; I have never thought it safe to leave it in position, *if it were there at all.* No woman has one minute's guarantee of life, much less of health, so long as she is the victim of this abnormal condition. I recollect the tragic case reported by my friend, Dr. Douglas, of Nashville, who was called to see a woman stricken at the counter in a drygoods shop, whom he found dead upon the floor. Shall we permit anybody to go about liable to a result so almost instantaneous, with a condition unattended to, which renders it possible? My own opinion, therefore is, that in the presence of pain and these eccentric signs of pregnancy, it is better first and foremost to examine your patient; study carefully the conditions that exist; and if ectopic pregnancy is found, then as speedily as the arrangements can be made relieve this woman of the sword of Damocles which hangs over her as long as the condition continues. I believe that to do less than this, is to do less than our duty to suffering womanhood that entrusts itself to our care. I am perfectly well aware that slight rupture and more or less hemorrhage may take place, and we may find concentric layers of clots that have been formed for a long time; within a week I have removed one of precisely that form, but because that woman had gone through three months of suffering and had not died, it becomes no argument that I should submit her or any other woman to a like danger. Therefore, I believe that the line of safe practice is to operate on an ectopic pregnancy whenever it can be diagnosticated. If we are to take any extreme position on this question, this certainly is the safer of the two. Expectant treatment is very likely to disappoint expectations.

Dr. MATTHEW D. MANN.—I have had considerable experience with ectopic gestation having seen perhaps a hundred cases; of these

I have seen only three where I thought it necessary to operate immediately. In these the hemorrhage was so great and the exigencies so severe that I operated within a few hours after seeing them.

I believe that the symptoms may be very much masked, and we may be led widely astray by looking out for classical symptoms. A couple of years ago I had four cases in two weeks; of the four I diagnosticated two, while the other two I didn't even suspect, but opened the abdomen looking for something serious, and found extrauterine pregnancy. I think everyone who does abdominal surgery must meet a good many where they suspect something else. One curious fact with regard to one of these cases impels me to relate it. Although she had an extrauterine pregnancy, she was normally pregnant at the same time, because seven months afterward she had a child which showed all the evidence of being full term, although an anencephalous monster. The woman is now pregnant again. I have seen two cases where extrauterine pregnancy occurred twice. I think there are a good many cases on record where it has occurred in the same woman twice.

We should all be on the look out for these cases and Dr. Reed has given us a striking illustration of the rapidity with which disaster may occur. I remember a case in Buffalo where the woman died suddenly and the husband was arrested for murder, supposed to have poisoned her.

Dr. C. C. FREDERICK.—I wish to state that the last case I operated on was a double-header, a gestation sac on each side.

POST-OPERATIVE TREATMENT OF ABDOMINAL SECTION IN WOMEN.[1]

BY WALTER B. CHASE, M. D., Borough of Brooklyn, New York City.

(Author's Abstract.)

THE author said that, other things being equal, the best after-results in these cases will follow the ones in which proper preparation had been made, and the operation performed in keeping with modern aseptic surgery.

In closing the abdominal incision, great care in coaptation, the use of chromicised catgut for layer suturing and silkworm gut for the through and through method were recommended. Sutures must not be tied too tight, or allowed to remain in too short a time, the writer recommending that in from ten to twenty days alternate sutures be removed, and a few days later the remaining ones. He condemned the employment of buried unabsorbable sutures, as they remain as foreign bodies, liable to cause pain and ulceration and therefore were unscientific and contrary to sound surgical procedure.

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[1] Read before the Gynecological Section of the American Medical Association, June 8, 1900.

Unless for fear of hemorrhage or undue traction he recommended greater latitude of position after laparatomy than has usually been permitted, as contributing to the patient's comfort and the smoothness of convalescence.

For shock he advised, before the close of the operation, a high enema of hot salt solution with an ounce of whiskey, together with proper cardiac stimulants, and, if necessary placing the head lower than the trunk.

In hemorrhage he advised promptness in arresting the bleeding and in emergency to operate on the bed without moving the patient. He said that while "blood is thicker than water, water is better than no blood," and that intravenous or intracellular injection of salt solution forms a most brilliant chapter in conservative surgery.

As for drainage he declared that every case must be a law unto itself, and he took issue with the statement that drainage means imperfect surgery, saying that the statement is illogical and dangerous, although he admits that the improved technique of today made the need of drainage less frequent. The results obtained in cases of septic peritonitis by through and through drainage was commented upon with hopeful interest.

The author stated that flatulence, nausea and vomiting were often unavoidable. If due to ether narcosis it would subside spontaneously. For nausea, he advocated frequent drachm doses of hot water, and for persistent vomiting high enemas of warm water containing two or three drachms of saturated solution of magnesium sulphate until the bowels were opened.

Nutrition should be administered cautiously, beginning twelve hours after the operation and should be entirely liquid, consisting at first of broth, then of beefsteak juice and limewater with milk.

He said that close watch must be kept of the urine both as to quantity and quality, as showing possible injury to the urinary tract and also diminution or suppression of the renal secretion. Suppression, partial or entire, must be energetically treated by salines, pure water by mouth, salt solution by the rectum, and if arterial pressure is diminished the use of digitalis and persistent dry cupping.

Pulse.—As a guide to diagnosis, prognosis and treatment in pelvo-abdominal surgery, he recommends careful study of the pulse as suggestive of complications. As is the pulse so is the patient. The preoperative pulse must be taken as the standard of comparison. Usually in cases which do well the pulse falls within the first twenty-four hours; while increasing rapidity suggests troublesome complications.

Temperature.—Attention was called to the fact that closely allied with the causes which induce rapid pulse are those which manifest themselves in connection with the use of temperature. It may be safely assumed that a proper appreciation of the causes which lead to variation of pulse and temperature will be the key to their management, whether the fever arise from sepsis, suppuration, peritonitis, malaria or other agencies, its course must be differentiated and the appropriate treatment applied.

He emphasised as a necessity that pus within the pelvic cavity must be evacuated and drainage established. So also the stitches in stitchhole abscesses must be removed and pus pockets disinfected. The writer affirmed that temperature arising form septic processes, either local or systemic, are usually the gravest complications which confront the operator.

The rapid pulse and feeble cardiac contractions with low fever or subnormal temperature must be distinguished from that attending depression and slow exhaustion. So also the advent of intestinal perforation or the evacuation of pus into the peritoneal cavity must be recognised and treated. Hyperpyrexia, due to intraperitoneal infection demands the prompt use of saline catharsis. The value of heat abstraction under such conditions by the use of the head and abdominal coil has its uses and limitations.

Pain.—The pain following laparatomy clamors for relief and cannot be altogether ignored, but it must not, the author insists, be inferred that it always or usually requires the use of anodynes. In fact he frequently finds them required—and when indicated usually restricts himself to codein, as it is less purturbing in its after-effects and interferes much less with peristalsis and secretions as compared with morphia.

The exhaustion following laparatomy may be of serious moment. Here the writer recommends prudent and well sustained alimentation, stimulation with supporting tonics, the most careful attention to good nursing, and the best hygienic surroundings.

263 HANCOCK STREET.

THE RECENT EPIDEMIC OF MEASLES IN BUFFALO.

By F. C. GRAM, M. D., Buffalo, N. Y.
Registrar of Vital Statistics.

MEASLES, as a rule, does not inspire much fear in the average person and is therefore no more dreaded than a severe cold. The fact that it is "only measles" is usually sufficient to put all precaution to sleep, which slumber continues until local quarantine measures prevent children from attending school, or until the undertaker calls, when the remainder of the family wake up.

Fortunately, the fatality from measles is very small, but no matter how small, some one may be the victim, and no one cares to have it a member of his household, if preventive measures will apply.

In examining the mortality statistics for Buffalo for some years we find that the deaths from measles for each year beginning with 1887, were respectively: 60, 35, 5, 56, 47, 18, 17, 11 and 99. In 1896, there were 342 cases with 33 deaths; in 1897 there were 976 cases with 38 deaths; in 1898 there were 46 cases with no deaths, and in 1899 there were 3,178 cases with 50 deaths.

As no reports of cases were kept in the Health Department, prior to 1896, it is impossible to say how many cases existed in the previous years for which the mortality rate only is given. We are, likewise, unable to say how the ratio of deaths corresponds to the number of cases, compared with the recent epidemic, but if it was anything similar there must have been fair-sized epidemics in 1887, 1890, 1891 and 1895.

This shows an intervening period of from three to five years between each outbreak of measles, of more than ordinary severity.

The year 1898 was a proverbial "lull before the storm," for during this year there were only 46 cases reported in the entire city, with not a single death.

Then came the great measles harvest. I have made a detailed table of cases and deaths for each month, from January, 1899, to May, 1900, as follows:

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1. Read at the Semi-annual meeting of the Medical Society of the County of Erie, June 12, 1900.

CASES OF MEASLES BY WARDS, 1899–1900.

Wards.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.	January.	February.	March.	April.	May.	Total.
1	....	....	....	....	....	....	....	....	....	....	1	9	10	12	17	3	13	2	47
2	....	1	....	....	....	....	....	....	....	1	1	5	8	37	56	44	17	2	156
3	....	....	....	8	6	1	....	....	....	....	11	28	54	33	58	20	4	1	116
4	....	1	....	....	....	1	1	....	....	1	26	41	71	21	26	23	9	......	79
5	....	....	....	....	....	2	3	....	....	....	40	118	163	85	150	44	10	12	301
6	....	....	....	....	....	....	....	....	....	....	17	16	33	32	25	7	4	2	70
7	....	....	....	1	5	....	4	1	....	5	38	22	76	11	8	6	7	......	32
8	....	1	....	....	2	....	....	....	....	11	53	48	115	23	6	13	1	2	45
9	....	....	....	....	....	....	3	1	....	18	55	33	110	20	2	2	......	......	24
10	....	....	10	....	....	....	3	....	....	11	48	31	94	13	7	1	......	2	23
11	....	....	....	1	1	....	....	1	1	7	67	126	204	64	40	7	......	4	115
12	....	....	....	....	1	4	....	....	1	3	48	83	140	6	3	1	7	4	21
13	....	....	....	....	2	1	3	....	1	7	46	39	99	19	7	6	6	1	39
14	....	....	....	2	1	....	....	....	3	17	136	134	293	41	6	2	2	......	51
15	....	....	....	1	1	5	5	....	....	1	30	104	147	24	12	6	5	1	48
16	....	....	....	....	....	8	1	....	....	....	25	118	152	15	12	3	2	1	33
17	....	....	....	1	67	15	11	....	1	1	60	134	290	67	30	15	8	10	130
18	....	....	2	2	8	10	7	1	2	24	135	295	486	37	17	9	4	3	70
19	1	6	4	6	4	....	1	....	....	2	3	3	30	11	23	58	27	10	129
20	....	....	3	4	2	10	2	....	....	....	....	15	36	14	28	24	15	18	99
21	....	....	....	....	4	5	1	....	....	2	9	72	93	66	50	9	11	39	175
22	....	....	1	3	44	30	2	....	1	....	2	15	98	40	54	85	36	16	231
23	....	....	1	2	25	25	3	3	....	1	5	11	76	22	11	24	10	26	93
24	....	....	1	6	43	18	2	....	....	1	27	145	243	124	95	78	61	63	421
25	....	....	....	11	11	19	6	....	....	3	11	49	110	37	29	65	9	9	149
Total cases...	1	9	13	48	227	154	58	7	10	116	864	1671	3178	874	772	555	268	228	2697
" deaths.	....	....	....	1	1	3	5	1	....	....	21	18	50	16	15	8	7	5	51

Total cases, 5,875. Total deaths, 101.

According to this table it will be seen that there was only one case in January, 1899, with no deaths; 9 in February, 13 in March, 48 in April and 1 death, 227 in May and 1 death, 154 in June and 3 deaths, 58 in July and 5 deaths, 7 in August and 1 death, 10 in September, 116 in October, 864 in November, with 21 deaths, 1,671 in December with 18 deaths making a total of 3,178 cases with 50 deaths.

In January, 1900, there were 874 cases and 16 deaths, in February, 772 cases and 15 deaths, in March, 555 cases and 8 deaths, in April, 268 cases and 7 deaths, in May, 228 cases and 5 deaths, making a total of 2,697 cases and 51 deaths for the first five months of 1900, or a grand total of 5,875 cases and 101 deaths since the beginning of the year 1899.

By reference to the annual report of the Superintendent of Education for Buffalo, we find that this number represents about one-tenth of the pupils registered in the grammar schools last year. An epidemic which will attack one-tenth of all the school children in a city is certainly worthy of the greatest attention. Not all schools suffered alike, but at times certain schools were so depleted as to give the question a serious aspect from several sources. From the knowledge obtained at the Department of Health, we know that this figure of 5,875 does not represent the entire number of cases of measles which occurred in Buffalo during the period in question. It is only a fractional part, but as we have no means of indication we are unable to give, even approximately, the total. This is owing to the fact that few cases which did not come under a physician's observation were reported, and those that were so reported are an indication that the epidemic contributed a trifle toward the support of the many hundred physicians in this city. A record of many cases was obtained when the children presented themselves for re-admission to school and found it necessary to obtain a proper permit. Hundreds of cases were unattended by physicians, either because of a lack of appreciation of the gravity of the disease, or because they wanted to await the outcome, or for economic considerations.

And right here I might refer to what was undoubtedly the greatest factor in spreading the disease like a prairie fire—aside from other probable conditions which undoubtedly influence epidemics of this nature.

As previously intimated there is a deep-rooted sentiment—often expressed even by physicians—that every person must have measles at some period of life, and that infancy or childhood is the best period. True it is that measles is a disease of childhood, and of all that class of diseases the most prevalent, but it is equally true that the best time to have measles—or any other disease—is never.

Under the influence of this sentiment, it is no wonder, then, that so little precaution is taken, or that we find an almost entire absence of precaution, except where actually enforced.

Children were frequently found attending school, or mingling with others, while members of their families were seriously ill, and it is common knowledge that parents often expose their children who have never had measles, so as to have it over.

Inspectors frequently found children covered with the rash of measles from head to foot running about and freely mingling with others, when they ought to have been carefully tucked in a warm bed, under quarantine.

According to the rules of the Health Department every case of measles must be reported, as well as other contagious or infectious diseases. The quarantine in this instance is not as severe as in scarlet fever or diphtheria and the premises are not placarded. The object of the notification, however, is to obtain a record of the case for statistical protective and preventive purposes. As previously indicated, it is not exact in the statistical branch for the reason that most of the cases which do not come to the notice of physicians are not reported. But there are more cases reported now than ever before, and the experience gained by all interested in the present epidemic is of great value.

Protective and preventive measures are instituted by notifying schools, libraries, etc., of the existence of the disease, so that members of that family may be excluded. The children are not permitted to reënter school until they produce a certificate from the attending physician, countersigned by the Department of Health.

This procedure seems unnecessarily severe at first thought, and has led to many arguments. It is contended that if the child who is ill remains away from school the others ought to be permitted to attend, while others believe that the physician's certificate ought to be sufficient without the formality of approval by the Department which is regarded in many instances as an unnecessary hardship, in that it demands a trip uptown with a possible expenditure of car-fare and the like.

All these steps, however, are the result of experience and have been gradually adopted to improve the system. It frequently happened that in mild cases the physician left a school certificate on making his final call, under the impression that it would not be used until the proper time, or he would give a certificate when the family learned the nature of the disease and told him not to call again, and this certificate would readmit to school, while others, who took the disease later were at home ill. The countersigning by the department, acts as a check, as every case is looked up before approval is given, and a record of each step is kept, so that the department has a complete history of every case and can give definite information to every inquirer. This information is most frequently sought after by school principals and teachers as well as employers.

The question of inconvenience or hardship is not entitled to consideration where the safety of the public is concerned. It is better to inconvenience one family than to expose an entire school.

It is a pleasure to note the intelligent and willing coöperation on the part of public school principals. As their salaries depend upon the attendance they naturally have a pecuniary interest, but so diligent were they in assisting to stamp out the disease that some were actually accused of going to the other extreme. Coöperation between the

School and Health Departments does much toward lessening an outbreak of any contagious disease.

It is not my intention to say anything regarding the treatment, but will leave that for those who discuss this paper. But I desire to say in conclusion that, although it is doubtful if measles, *per se*, is the cause of many deaths, yet during the recent epidemic many cases were reported as ranking with malignant scarlet fever in severity. From this we infer that the complications, which are usually credited with taking the life of the patient, are not always responsible, but it is equally true that if the disease had been taken more seriously there would not be such an outrageous credit to it in the death column.

460 GLENWOOD AVENUE.

Society Proceedings.

MEDICAL SOCIETY OF THE COUNTY OF ERIE.

Semi-annual Meeting, June 12, 1900.

REPORTED BY FRANKLIN C. GRAM, M. D., Secretary.

DR. E. H. BALLOU, the president, called the semi-annual meeting to order shortly after 10 a.m., June 12, 1900, in the Y.M.C.A. parlors. After the minutes of the previous meetings had been adopted the chair appointed Drs. Ingraham, Strong and W. W. Potter a committee to prepare a suitable memorial on the death of Dr. E. T. Dorland. This committee later presented the following, which was adopted:

IN MEMORIAM—E. T. DORLAND, M. D.

Again the Medical Society of Erie County is called upon to mourn the loss of one of its oldest and most distinguished members, Dr. Elias T. Dorland, and it desires to enter upon its records its appreciation of his professional worth and character.

Dr. Dorland was born in Union, Dutchess County, New York, April 12, 1832. His father, Joseph Dorland was a prominent physician in that county. In early life, he came with his father to East Hamburg—now Orchard Park—this county, and received his preliminary education in the public school of this village, and at Springville Academy. He began his medical studies in Buffalo, and attended the Medical Department of the University for one year. Later, he became a student of the University of Michigan, graduating from this institution in 1854. For two years he was a resident of the Erie County Almshouse when he located at Lagrange, Duchess County, where he remained twelve years. He then returned to East Hamburg, the home of his childhood. In 1872 he came to Buffalo, where he since resided, and continued in the practice of his chosen profession until three years ago, when failing health compelled him to retire from active work, yet he always maintained a deep interest in the profession and was a loyal disciple of legitimate medicine. Dr. Dorland was President of this Society in 1886. He was one of the original members of the New York State Medical Association. He was endowed with one quality which it would be wise for all the younger members of the profession to emulate—his business ability. He was always kind and genial, and possessed of an amount of wit and humor far beyond the average.

Dr. Dorland was one of the best known and most respected, of the physicians of Buffalo, and his death leaves a sadly deplored vacancy in our ranks.

HENRY D. INGRAHAM,
O. C. STRONG,
WILLIAM WARREN POTTER.

Dr. W. W. **Potter** moved the adoption of the amendments to the by-laws, as presented at the January meeting. The motion was carried.

Dr. W. W. Potter, chairman of the committee on membership, then presented the following names of candidates who desired admission to the society: Drs. Chauncey P. Smith, William R. Little, Robert K. Grove and Francis M. O'Gorman. The membership committee reported favorably and they were elected.

Dr. J. B. **Coakley** submitted the following report from the Board of Censors, which was adopted:

To the Medical Society of the County of Erie:

Gentlemen—Your Board of Censors hereby makes report of its work and transactions since your last annual meeting, as follows:

During the past year your board has continued to employ the services of Hon. Tracy C. Becker as counsel for this society at the same compensation as was paid to him during the preceding year, and all complaints needing legal prosecution have been referred to him therefor.

During the past half year complaints have been made against certain persons engaged in business and advertising themselves as dermatologists, chiropodists, etc., and using the title of "Dr." in connection therewith without being properly licensed and registered under the medical laws of this state. Such persons have been notified that they were violating the law and have, under threat of persecution therefor, discontinued the use of such title.

In the case of William Carpenter an indictment has been found for practising in this city without a license and said case is still pending and will probably be tried at the next criminal term of the Supreme Court.

About the 1st of April, 1900, complaint was made to your board that one Frances Andrus, who advertised herself as "the person who discovered the process of permanently removing freckles, moles, birthmarks and all blemishes from the human skin," had treated the young child of a Mrs. Kendall, by applying some lotion or substance to a face-blemish or mother's mark on the face of said child, and had permanently disfigured the child's face without removing the blemish or mark. On examination of the child by some of the members of your board and by Dr. Ernest Wende, this complaint seemed to be substantiated by the fact that the child's face bore evidences of scars in and around said birthmark and blemish, which were probably caused by the application of some acid or other substance. In addition to this Mrs. Kendall produced a written contract, signed by Mrs. Andrus, guaranteeing for a sum stated to remove said birthmark and blemish. Our counsel procured a warrant to be issued by the police magistrate for the arrest of Mrs. Andrus, an examination was had and she was held to answer before the Grand Jury, and in default of $500 bail was committed to the County Jail. The Grand Jury of the County Court indicted her for the misdemeanor of practising medicine without a license, and on the 10th and 11th of April she was tried and acquitted by verdict of the jury of the misdemeanor charged, although the proof was absolute and undenied that she had made the contract with Mrs. Kendall and had given the treatment to the child as above mentioned.

The case seems to have been faithfully prosecuted by the District-Attorney, and the verdict to be one of those miscarriages of justice which will sometimes occur in a great city like this, in which a jury may be impanneled consisting of men who are hostile to the execution of the laws designed for the protection of themselves and their families, as well as other citizens, against the illegal practice of medicine.

In this case, and in the case of numerous complaints made to us in reference to the practices of so-called osteopaths, masseurs, and persons who advertise to cure everything by the use of the electric current and other similar devices, although not advertising or using the title of "Dr.," . . . we are constantly confronted by the limitation placed upon the meaning of the terms "medical or surgical treatment" used in the statute against the illegal practice of medicine, by the decision of Judge Daniels in the old case of Smith against Lane (24 Hun., 32) in which it was held at the General Term of the Supreme Court that the practice of medicine in the meaning of the law was practically restricted to the prescribing of drugs or using surgical methods of cure, thus easily permitting unchallenged the various socalled systems, as osteopathy, massage and the like.

We are informed by our counsel that after a conference by him with Dr. Maurice J. Lewi of the State Board of Medical Examiners in New York and a meeting of the full board of examiners, together with the Secretary of the Board of Regents and the Statutory Revision

Commissioners at Albany, and correspondence with Hon. Robert S. Taylor, counsel for the New York County Medical Society concerning this defect in the medical law, and other defects therein in reference to the revocation of licenses, etc., several amendments to the medical law were prepared and approved by the authorship, and introduced as part of the scheme of revision of the statutes by the Statutory Revision Commission, at the last legislature. There was no opposition to these amendments, but for reasons connected with the abolition of the Statutory Revision Commission, and the appointment of a committee of the legislature to do this work, none of the bills prepared and presented by the Statutory Revision Commission were passed this year. We are, however, assured that the proposed amendments will be pressed upon the attention of the next legislature by the State Board of Medical Examiners and the Regents of the University, as well as by our counsel, and the counsel for the New York County Medical Society, who are all acting together, with more than a fair chance of such amendments being adopted.

Respectfully submitted,

J. B. Coakley, Chairman.
H. R. Hopkins.
Thomas F. Dwyer.
Irving W. Potter.

Dr. A. L. Benedict stated as there were two medical societies in this state, and as most of the members belonged to both, it might be well for this society to inaugurate such steps as will ultimately bring about a union. He therefore submitted the following resolution:

Resolved, That the president appoint a committee of three to consider the feasibility of unifying the dual system of state and county medical organisations existing in the State of New York, and of securing representation in the American Medical Association, said committee to report at the annual meeting in January, 1901.

Dr. Eli H. Long said he was not aware of any second county organisation at the present time.

Dr. William Warren Potter said he considered the resolution unnecessary, to say the least. There were rumors of the organisation of an Erie County Association, but until this society received official notice to that effect he was opposed to meddling with other bodies. This society received its power from the State Society, in existence since 1806, and was responsible to it for any action it might take in the premises.

Dr. J. B. Coakley favored the resolution and seconded it. He considered it in proper spirit and hoped to see the time when there will be but one county, state and national organization. This is the only state in which two such organisations exist. He never affiliated with the second organisation because he was opposed to such friction, but he favored a union.

Dr. Pohlman.—"As I understand it a man can not belong to both, except he makes a liar of himself?"

Dr. W. W. Potter.—"You would not in all probability be recognised by the association as a delegate from this society, but you might attend the national association as an individual."

Dr. Geo. F. Cott.—"This society is the only one recognised by law in this state."

The resolution was adopted and the president appointed the following committee to consider its provisions: Dr. A. L. Benedict, chairman; Coakley, Thornton, E. H. Long and W. W. Potter.

Dr. C. E. **Congdon** called attention to several conditions at present existing in Buffalo to the detriment of legal practitioners. Inasmuch as no improvement of the evils could be expected through the District Attorney's office, he moved that the society employ a competent attorney with bull-dog tenacity, who should look after all illegal practitioners, and who should receive as his fees all the fines to which this society is entitled by law, the appointment of this attorney to be left with the president.

Dr. Walsh seconded the resolution and approved its sentiment.

Dr. E. H. **Long** raised the point of order that the resolution was in conflict with the by-laws of this society, and should properly be offered as an amendment to the same.

The president sustained the point of order, but as Dr. Congdon was suddenly called away the subject was dropped.

The secretary stated that the parlors of the Y.M.C.A. had been placed at the free disposal of this society. Several meetings had already been held there and he moved that in addition to the usual vote of thanks the janitor be given $5 for additional work. Carried.

Dr. **Geo. F. Cott** then explained the treatment of radical operations on the ear and exhibited several cases.

Dr. F. C. **Gram** read a paper on The Recent Epidemic of Measles in Buffalo, and gave figures and results which he had collected as Registrar of Vital Statistics. (See p. 39.)

Prof. C. N. Millard, supervisor of Grammar Grades of Public Schools, discussed the paper, giving the relation which the epidemic had to the public schools. He said that the statistics given hardly represented the black eye which the schools received and that it would take a long time to recover from the effects. In school No. 56, with an average attendance of 600, there were 89 out in one week, one class of 47 was decreased to 22. In No. 59, with an average attendance of 628, there were 427 out for measles in one week. In No. 44, with a registration of 977, there were 252 out in one week of which 103 were from the first grade in which the registration was 260. No. 26 lost 300 out of 720 in one week. No. 59 had its average cut in two by measles. He believed that in most cases the danger from contagion was done before it was discovered by the principal, and questioned whether exclusion from school had the desired effect when the children mingle in play on the streets or at home, ride in street cars, attend church and the like. In some cases of truancy the children gave measles as an excuse. He hoped that additional health inspectors would be appointed to alleviate some of the present causes for complaint.

Dr. IRVING M. SNOW said the recent epidemic of measles was the severest he had ever witnessed. The statistics presented by Dr. Gram showed that with the closing of the schools during vacation the number of cases immediately dropped to a low figure, and immediately increased when schools were reopened. Closed rooms, at a season when windows could not be freely opened, also contributed in the spread. He questioned the mortality statistics.

Dr. H. D. INGRAHAM believed the mortality rate was greater than reported, otherwise it must have been considerably below the average.

In one New York hospital it was 70 per cent. and Dr. Jacobi holds the mortality rate of epidemics at from 25 to 33 per cent. The mortality is greatest in children under two years.

Little can be done to prevent the spread. The only effective way is to put the child in bed as soon as it shows symptoms of measles and keep it there until it has completely recovered.

Dr. E. H. LONG considered that it would be valuable to the school department and physicians if both joined in discussion of similar subjects oftener. The Health Department was likewise a great educator of the public, which clung to erroneous ideas concerning many medical subjects. He believed the important point in the statistics presented was indicated by the mortality and the season. He also briefly discussed the treatment.

At 12.30 the society adjourned.

Correspondence.

ETHNOLOGY AND ARCHEOLOGY AT THE FAIR.

To the Editor of the Buffalo Medical Journal:

SIR.—The Pan-American Exposition has seen fit to entrust the care of the department of ethnology and archeology to a practising physician. I should be very glad if you would allow me to reach your readers with the following request for assistance.

Many members of the medical profession are interested in the study of American ethnology and archeology and not a few have valuable collections of Indian relics and skeletons from Indian graves. Those not directly interested in this study are so circumstanced as to be aware of the hobbies of their neighbors and could doubtless furnish the address of collectors. I should be greatly obliged for information and for the loan of collections for the use of this department of the Exposition. Exhibits which represent study in some special line of American ethnology and archeology will be particularly suitable.

Very truly yours,

A. L. BENEDICT, M.D.,
Supt. of Ethnology and Archeology.

BUFFALO, N. Y., July 3, 1900.

NEW YORK SCHOOL OF CLINICAL MEDICINE.

To the Editor, Buffalo Medical Journal:

SIR.—The New York School of Clinical Medicine has not been discontinued. Will you kindly publish this statement in order to refute the erroneous announcement to the contrary appearing in a few of the medical journals?

Very truly yours,

MARCUS KENYON, M. D.,
Secretary New York School of Clinical Medicine.

NEW YORK, July 12, 1900.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges should be addressed to the editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

VOL. XL.—LVI. AUGUST, 1900. NO. 1.

NEWSPAPERS AND MEDICINE.

A QUESTION which is beginning to seriously attract the attention of medical men throughout the country, is the alarming increase in the advertising of medicines and the practice of medicine for improper purposes in the daily newspapers. It is not so long ago that the advertising portion of the newspaper which was given up to the broad enough heading of "Medical" contained a few announcements of face bleaches, hair dyes, corn cures and the like, which if they did no good and did not effect cures or beautify the human race did not do irreparable damage in the majority of cases. Now and then there appeared an advertisement of Dr. Soandso who announced himself as a specialist in chronic and nervous diseases, but beyond that it seldom went. Now, on the contrary, one cannot pick up a daily newspaper without finding a set of medical advertisements which brazenly proclaim the trade of the abortionist and the fake specialist; hope is held out to the incurable and his money is taken when there is no hope for him and taken by the most questionable methods. Those men who set themselves up as specialists in "female troubles" do untold damage and put a premium on the crime of abortion; the newspapers which receive the advertisements of this class are morally to blame for they make it possible to point the way to these dens of robbery and quackery where mysticism reigns and terror rules supreme.

MAR 22 1902
LIBRARY

Does it need any explanation whatever to interpret the real meaning of this advertisement clipped from a Buffalo newspaper?

"Ladies who are despondent and in trouble can obtain sympathy, counsel and aid by calling on Dr.———."

The following advertisement clipped from the same newspaper, the same day has but one meaning and even the most ignorant can understand it. It means abortion and nothing else.

"Ladies.—Ladies English Monthly Regulator relieves in two to five days."

These are samples of advertisements which appear every day and are not by any means the most brazen which are carried into the homes of the people of Buffalo and every other city of the state. The newspapers of Buffalo might miss a few dollars by throwing out these filthy advertisements which appear to be on the increase, but by purging their advertising columns they would rise inestimably in the minds of a decent people who do not care to have the filth of the fakir and the bid of the abortionist served with their coffee every day.

The *Christian Herald* has shut out all medical advertisements of whatever character and has made public announcement of this fact. Referring to this the St. Paul *Medical Journal* says:

> We fear that we cannot hope to see this example followed by the lay press, but we have always believed that a newspaper which announced that it would admit no filthy advertisements, no advertisements which a decent man would not be willing to read aloud to his wife and daughters, would lose nothing by so doing and would probably be the gainer by it.

Following close on this reform on the part of one of the leading denominational journals of the country a daily newspaper stepped to the front and in a terribly bitter arraignment of the "plunderers" announces that its columns are forever closed to advertisements of a sexual or venereal character. This pioneer in honestly decent journalism is the St. Paul *Daily News*, which, in referring to the matter says:

> The man who trades on the ills of his fellow being, who carries on a system of highway robbery and deludes the unsuspicious and ignorant into belief in his quackery, and who worms the money from the suffering to chuckle at their credulity, is a villain by nature and has made no attempt to improve on the original plan of his conception.
>
> And yet these scoundrels are permitted to ply their trade unhindered by the newspapers and untouched by public sentiment, because forsooth their large and showy announcements put a few dollars into the ever-reaching maw of neglectful and indifferent publications.
>
> It is time to call a halt. It is time to rigorously enforce all legal restrictions against the existence of these plunderers; and if legal measures fail, it is the duty of the newspaper by forewarning to guard

the public against those snakes in human guise. And their number is legion.

It is a moderately safe premise that an institution that promises absolute cures, without reserve, is a good place to avoid; but when an institute backs these promises by agreements, only to secure money and then to turn the cold shoulder to the poor sufferer who paid his all for treatment, it becomes nothing short of obtaining money under false pretences, and should be treated as the crime deserves.

The *Daily News* makes no sweeping charge that all advertising medical institutions are to be placed in the same category. But the *Daily News* is now unearthing the methods of the more dangerous and boldest medical fakirs, and will shortly let the full light of publicity shine upon their nefarious practises. These unscrupulous "quacks" are rascals of the first degree, and robbers in the fullest sense of the word. The *Daily News* will give the public an opportunity to discover whether this gentry can or cannot be suppressed, and whether these festering leeches whose sole thought is gain, whose every act is dictated by a wish to profit by the ills and sufferings of poor humanity, whose very ailment and physical weaknesses should entitle them to sympathy and protection, can or cannot be suppressed.

There is now an opening for a pioneer in this line in Buffalo. There are seven daily newspapers in this city and their proprietors are men of standing socially, morally and to a certain extent religiously. It will be interesting to see which of them puts the decency-in-advertising rule into effect first.

A GREAT LIGHT FROM PHILADELPHIA.

OUR attention has been directed to an editorial in the Philadelphia *Medical Journal*, July 21, 1900, commenting upon medical matters in this state. The subject is important and further comment seems necessary.

Our impression is that the editor is on his vacation, that the understudy is temporarily indisposed and that the typewriter is new at the work; certainly a more ignorant, illogical and misleading statement upon well-known matters of medical history we have yet to see.

What are we to think of a writer's Americanism who solemnly decides that a state medical society is all wrong which has existed for nearly a century as a delegate or representative body? What a misfortune that the colonies did not have the services of the writer of this so-called comment; and think of what a constitution he could have framed for a government in which every man might expect to be a member of the legislature and every woman a president, or at least a governor!

Again, what are we to think of the sanity of a writer who seriously avers that it is impossible for the members of a county medical society to select certain of its members to represent the society in a central body, or to contend that a central body so constituted could not in any sense be representative of its several constituents?

How empty of think is one's think-tank who concludes a ponderous paragraph for the enlightenment of the American Medical profession as to the history of the profession of the State of New York and its state society, with the idiotic conclusion that because "The state society now numbers about 600 members out of an estimated total of 9,500 medical practitioners in the state," therefore the former cannot represent the latter.

We feel like offering the writer of this malodorous effusion as a piece of news, the fact that the United States Government exists and its congress of less than 600 members represents its people of some 75 millions.

Finally, what shall we say of the taste of one who writes to illumine the world out of such Egyptian darkness?

BUFFALO AS AN ISM CENTER.

IT ONLY remains for some kindly light in the ocult sciences to open up a school for the dissemination of voodooism in this city, and then Buffalo will be amply supplied with all the isms and a full line of fake cures. Already there are in operation mills for the turning out of practitioners in christian science or Mothereddyism; osteopathy; chierotherapy, which by the way is a splendid opportunity for the never-do-wells in life; and now comes a disciple who advertises that he will teach weltmerism in a few lessons. This is an unexcelled chance. The advance agent of the new school, which by the way will cure a patient of any old disease in any old length of time for any old price, informs his prospective students that it is easy to make from $20 to $30 a day and not work nights either. Weltmerism, moreover, is a product of the wild and woolly west and makes a specialty of turning very ordinary and illy-educated mortals into full-fledged practitioners of the new cure by a hanky-panky, now-you-see-it-and-now-you-don't, sort of method. Incidentally, it cures the most grievous complaints and never goes near the patient. Distances makes no difference; in fact, that is the long suit of this school—the absent treatment scheme; but you must send your money in advance. If you don't get better it's the fault of conditions which surround you, not the fault of the weltmerist. If you haven't a disease send a dollar, and your business will increase before the dollar reaches the weltmerist. This statement is not an exaggeration; it is a solemn claim made in the organ of the cult. Just one more step in the line of progress and we shall read announcements offering unparallelled advantages in instruction in snake-skinning and bone-throwing by voodoos of long experience and great reputations.

FOR THE ANTIVIVISECTIONISTS.

THE Province of Quebec has been having an epidemic of smallpox and the board of health says that there were reported and treated since August of last year, when the first case was brought to their attention, no less than 515 cases. Of this number there was one death—that of a patient who had never been vaccinated; on the other hand, all the others who suffered from the disease had it in a very mild form and not one died. Here is a matter for the antivivisectionists to think of. Imagine—and there is room for imagination, too—how many deaths there would have been of the 515 cases had none of the patients ever been vaccinated. Let us imagine now, taking up the favorite argument of the misguided persons who place animal life above that of the human in point of value and care, that this one death in the province of Quebec was simply a coincidence; that the patient just happened to be free from vaccination and would have died anyway whether he had been vaccinated or not. Be that as it may, the fact remains that of all who were sick he was the only one who had never received the preventive treatment. Let that pass, however, and give the antivivisectionists the benefit of the doubt while we look over the results in Chicago which have just been made public. Since May, 1899, there have been admitted to the Chicago Isolation Hospital forty-nine cases of smallpox. In no case had the patient ever been vaccinated. In every case the police were the first to handle the patient and deliver him to the hospital authorities. Not a single policeman or police attendant contracted the disease. Every police officer in Chicago is compelled to submit to vaccination or he cannot remain on the force. Since 1894 there have been a great many cases of smallpox in Chicago coming from the lake boats and from outside the city. Since that date there have been only four cases of smallpox coming from the schools and they were light;

every school child in Chicago must present a certificate from a physician that a successful vaccination has been done, else the child cannot enter the school. And yet the antivivisectionists declare that vaccination does not protect.

THE MEDICAL SERVICE SCANDAL IN SOUTH AFRICA.

BURDETT-COUTTS raised something of a breeze in England recently when he arose in Parliament and ripped into the management of the South African war in undisguised English. He had just returned from the seat of war and was full of information. His description of the suffering to which the sick and wounded were subjected, because of lack of medicines and medical attendance, sent a chill of horror over all England and do what they could the government representatives could not make a satisfactory answer. This condition is something similar to that which obtained during the Spanish-American war, although be it said in all fairness, the American army was at no time in such condition as Burdett-Coutts reports the English soldiers to have been. While it is true that there was insufficient medical attendance and too few supplies in both wars, yet the fault does not lie at the doors of the Surgeon-General of either army, nor yet are the medical departments and staffs to blame. The fault lies wholly and solely with the politicians who have not, and even yet cannot, see the necessity for a sufficiently large corps of surgeons to meet all requirements. When Surgeon-General Sternberg was brought face to face with the problems of a war he was found to be disgracefully short handed, although his corps was manned to the limit provided by the laws which a beneficent and politically infected congress had seen fit to pass. In his extremity he employed contract surgeons, as many as the law allowed, and these men without military training went in and practised medicine. Naturally, there was waste of supplies and losses of material as there was bound to be where men knew nothing of the red tape of departmental paper work; yet these men practised medicine and the world saw a well-equipped and generally competent corps of surgeons at work under Surgeon-General Sternberg in a very short time, and excellent work was done, too.

The whole fault lies with the politicians and the headquarters. The politicians cannot see the benefit of giving an army sufficient surgeons to meet emergencies which arise; they cannot see any reason why the corps should be large enough to give a certain number opportunities to study and make scientific research. They allow merely enough to do the actual work of the army. Then, too, there is the general, hidden contempt in which army medical men are held by the departments and the line; headquarters neglects them; the corps is disgracefully undermanned; surgeons are seldom mentioned in reports, except when they are killed or die from overwork. The needs of an army do not appear to be considered in connection with the medical department, the apparent and popular idea being that an army surgeon has little or nothing to do and is paid a good salary for doing it. The conditions in this country and England are largely similar at this time and the studied ignoring of the medical departments amounts to little short of absolute criminality. In South Africa the surgeons are working day and night; in the Philippines they are working night and day; nearly all the American regular army surgeons are on foreign service, only enough being retained in this country to keep department matters from hopelessly tangling. The most important, the most necessary duty the coming congress has before it is to authorise an appreciable increase in the numerical strength of the medical department.

THE COLLECTION OF GARBAGE.

ONE can form a very fair idea of the condition of public thought, by watching closely the popular correspondence columns which every modern daily newspaper now finds it necessary to maintain for the purpose of giving free and untrammelled expression to public opinion, that invisible yet all-powerful force which shapes the destinies of men and rules the world. One matter which concerns municipal sanitation has been cropping out in Buffalo very frequently of late in these letters from the people. In this way has attention been directed to the garbage question and the fact that the collections of refuse and swill are altogether too infrequent for a city as populous and as big as Buffalo. The general trend of these letters is, that while the work is well done so far as it goes, it does not go far enough in that the garbage is taken away only twice a week. This surely, is a matter of moment and quite important enough to demand the attention of the Health Commissioner and the Board of Public Works.

As it stands now, the contractors are authorised to make collections only twice a week, and in the interval the immense and increasing supply of garbage stands in barrels and swill cans, befouling the air and making admirable garden spots for the culture of the organisms of disease. In the late fall and winter months twice a week may be sufficient for the collection of garbage; but certainly during the summer months there should be at least three general collections each week and in the more populous centers four, which would be every other day, and would not be any too frequent.

This is a matter which needs only the sanction of the Board of Public Works and a recommendation from the Health Commissioner; then there should not be any time wasted in rectifying what is palpably an oversight in a sanitary matter of the utmost moment.

A NEW PURPOSE OF CANCER.

AND now comes Clayton Jones nursing an idea in the *Lancet's* incubator of thought. The public or that portion of the public which has the good fortune to be interested in scientific matters sufficiently to take note of medical literature in passing, has been given a sort of pre-natal glimpse of Clayton Jones's idea and verily it is bizarre enough to entitle Clayton Jones to a front seat.

In his mental scientific combings Clayton Jones—there is a something delightfully rhythmical about that name--found an idea which to him opened up and explained away the whole cancer question. There was first presented to him the fact that a great many women have cancer after reaching a certain advanced age. Now, that was a fair enough beginning and Clayton Jones—that rhythm is certainly delicious—seized on it with the avidity of the incorrigible scientist and set him to work to find out why. To reach this end he made deductions. Heaven forbid that a reader of the JOURNAL should accompany the Jones gentleman through the brain twistings of his deducing journey; let it suffice that he deduced and that he gave birth to his idea which is that "modern civilisation has done away with the usefulness of women past the menopause," and that the appearance of cancer in elderly women is "nature's first effort to remove those useless individuals."

Naturally, after reading such an unblushing exposé of nature one marvels what manner of person this Jones gentleman is, that he should hold up one of the dearest institutions of youth—the grandmother—as a useless bundle of decaying tissue which his friend nature is saddling with the most horrible of all afflictions for the purpose of removing.

There are very few men who will not look with pity upon the Jones gentleman who attacks a class of women that from time immemorial have been the great bulwark of comfort and the refuge of safety to the great army of boyhood and girlhood. The grandmother occupies a warm corner in the heart of the world, the dear old, white-capped lady, with the soothing voice, the gentle, ministering touch, self-sacrificing and generous, whose faded eyes still shine with the love of life, whose silvern hair tells of years of toil and trouble, and joy and sadness, and work and the agony of maternity and the sweet joys of motherhood; whose face is deep scarred with the wounds of time, whose daily life and whose every act is anticipatory of the sweetness and the restfulness of the long sleep which is to come.

But then, maybe, Clayton Jones—does the name sound musical now?—never had a grandmother; maybe he never had a mother; maybe he's like Topsy; maybe he just "growed." Let us hope so anyhow. And then let us forget Clayton Jones—the man with the unnatural idea—Clayton Jones the confidante and friend of nature.

THE New Haven Medical Society is at work on a law which has been too long on the statute books of Connecticut, whereby a judge can compel a physician to testify regarding matters which in the majority of states would be considered as privileged communications between physician and patient. The physicians in general all over the Nutmeg State are giving their support to the movement for the repeal of the law. It should be repealed. Such laws are obnoxious and distasteful. Physicians should not be compelled to divulge the statements made to them by patients, who when they tell facts to a physician, do so knowing full well that they are considered confidential and that only by so doing can a proper diagnosis be made and a cure effected.

AFTER learning that the plague was carried and disseminated by rats the foreign scientists have unearthed a new and dangerous method of transmission. At Tokyo it has been demonstrated that fish are very generally infected with the plague bacillus. This, if true, is a serious question which the foreigners have to face, for fish is largely an article of diet in the section of the country in which the experiments were made. Crabs, too, have latterly been shown to be infected.

THE acquittal of Howard C. Benham was practically a victory of Buffalo. The majority of the scientists who appeared for the defence as medico-legal experts were Buffalo physicians and their evidence and their findings showed to the jury that, legally, Howard C. Benham was not guilty of the murder of his wife for which he had once been sent to Auburn to await execution in the electric chair. In connection with the acquittal of Benham a curious and interesting question has arisen. At the time he was in the death chamber at Auburn, merely awaiting the coming of the day which had been set for his death, the insurance company in which he was a policy holder offered to pay the full face of the policy—$6,000—rather than carry on its books a satisfied claim in the case of a murderer who had been executed. The company did not, of course, anticipate a new trial and an acquittal. They paid the insurance and now Benham is free and has had the benefit of the money which ordinarily is only paid after proofs of death have been filed. It is not known what the company will do; but the question arises, can Benham be insured in the same company again, it having already paid his death claim?

THE Knights of Honor at their recent convention in Buffalo discussed and decided two very important subjects at their sessions. They considered christian science and suicide. Christian scientists are admitted to membership and suicides are not barred after five years. The vote of christian science was 64 to 13. Whether the Knights needed the money or whether Mother Eddy did one of her white mahatma acts from a distance will never be known; but an interesting phase of the question will be the action of a christian scientist who happens to be appointed on the sick and benefit committee.

THE Trenton, N.J., Board of Health has nailed the tuberculosis flag to the mast head and issued an order placing that disease in the same category with smallpox, diphtheria, scarlet fever and other contagious and infectious diseases. Patients must be isolated and disinfected and hospitals are not exempt from the provisions of the order. Physicians are required under penalty of fine and imprisonment to report each case within thirty days after diagnosis and to send a sample of the sputum with the report. Trenton is in New Jersey, a state which has stood the jibes of the United States for years, but it has suddenly stepped to the front as a city with a progressive and fearless board of health. Trenton will wipe out tuberculosis, or come very near it with such a rule enforced.

GOVERNOR-GENERAL LEONARD WOOD, M.D., of Cuba, recently paid a timely visit to this country. He reports the rural districts of Cuba to be in excellent condition as to health, and that even the cities are free from the usual sickness that has heretofore prevailed. General Wood visited Boston and quieted the apprehensions of the Cuban teachers at Harvard, who feared they would soon be compelled to abandon their studies and return home for the want of funds. This, he said, was not the fact, but they would be allowed to finish their work. Cuba appears to be undergoing civil and sanitary regeneration at a rapid rate. Let us hope that our government will not be tempted by mistaken anti-imperialistic political shouting to relinquish its guiding hand too soon. Under the beneficent rule of the present Governor-General, Cuba is more prosperous than ever before and it is always safe to continue such an administration.

PERSONAL.

DR. A. M. PHELPS, of New York City, president of the Medical Society of the State of New York, attended the annual meeting of the Oregon State Medical Society, held at Portland, June 26 and 27, 1900. Dr. Phelps gave up an attractive trip elsewhere that he had in contemplation, for the purpose of accepting the invitation of the Oregon Society. He read three papers, or demonstrated three subjects, relating to orthopedic surgery. The meeting was the most successful in the history of the society.

DR. LEONARD B. ALMY, of Norwich, was elected president of the Connecticut State Medical Society at its annual meeting, held at New Haven, May 23 and 24, 1900. Dr. Almy served as chief surgeon of the 2d Division of the 2d Army Corps, during the Spanish-American war, and was also in charge of a section of the general hospital at Montauk Point until the close of the war. Dr. Almy visited Buffalo early in July and was the guest of his father, A. H. Almy, Esq., of 930 Main Street.

DR. ROBERT K. GROVE, of Buffalo, who for the past eighteen months has been prosecuting his studies in Europe and in Dr. Knapp's Hospital, New York City, announces that he is now associated with Dr. Benjamin H. Grove, at 334 Pearl Street, near Huron Street, in the treatment of diseases of the eye, ear, nose and throat. Consultation hours: 8 a.m. to 1 p.m.; 6.30 to 7.30 p.m. Sundays: 9 to 10 a.m.; 12.30 to 1.30 p.m. Other hours by appointment.

DR. R. B. GRANGER, of New York, who was for a number of years in charge of D. Appleton & Co.'s medical publications, announces to his medical friends and acquaintances that he has established business relations with the American Plasmon Syndicate, limited, of New York. Dr. Granger's many friends in the medical profession will be pleased to learn of his new enterprise and bright prospects.

DR. A. VANDER VEER, of Albany, N.Y., professor of abdominal surgery and dean of the faculty of Albany Medical College, and a regent of the University of the State of New York, has recently been appointed a member of the consulting board of the New York State Hospital for the care of crippled and deformed children.

DR. ARTHUR MACDONALD, specialist in the United States Bureau of Education at Washington, and Dr. Ella B. Everett, resident physician at Woman's Hospital, Philadelphia, are announced as engaged to be married. We believe the nuptials will be celebrated at an early day.

DR. WILLIAM F. BECK, U. of B. '93, of Vermillion, O., paid a brief visit to Buffalo during the latter part of July. Dr. Beck took his wife from this city, and the death of Mrs. Beck's father was the occasion of a sad errand of duty by Dr. and Mrs. Beck at the time mentioned.

DR. MARIE LOUISE BENOIT, U. of B., '96, until recently a medical interne at the Craig Colony for Epileptics, has been promoted from the civil service list to the position of resident physician at the State Custodial Asylum for Feeble-minded Women, at Newark, N. Y.

HON. HENRY W. HILL, of Buffalo, N.Y., who has represented the second assembly district of Erie County in the legislature for several years, received the degree of LL. D., at the last annual commencement of the University of Vermont.

DR. M. E. FISHER, U. of B. '94, of Yorkshire, N. Y., was nominated for the Assembly at the recent convention held in the 2d Assembly District of Cattaraugus County. It took eighty-five ballots to do the work. Dr. Fisher is to be congratulated on the result.

Dr. Victor C. Pedersen, of New York, has been appointed assistant demonstrator of anatomy at the College of Physicians and Surgeons, and assistant surgeon to the out-patient department of Roosevelt Hospital. Dr. Pedersen is a brother of Dr. James Pedersen, who is adjunct professor of venereal and genito-urinary surgery at the Post-Graduate Medical School.

Dr. Irving P. Lyon, of Buffalo, announces the change of his residence and office from No. 75 Niagara Street to 531 Franklin Street. Hours: 8 to 9.30 a.m.; 2 to 4 p.m. Telephone, Tupper 614.

Dr. W. Scott Renner, of Buffalo, was elected vice-president of the American Laryngological, Rhinological and Otological Association at its last annual meeting, held at Philadelphia.

Dr. R. T. Rolph, of Dunkirk, has been appointed resident physician in the hotel and sanitarium at Castle Creek, Hot Springs, Arizona.

OBITUARY.

Dr. Alexander J. C. Skeene, of Brooklyn, died at his summer home in the Catskill Mountains, July 4, 1900, aged 62 years. He was born of noted Scotch parentage at Fyrie, Aberdeenshire, Scotland, and came to this country in 1857. Soon afterward he entered the University of Michigan, but took his doctorate degree at Long Island College Hospital in 1863. He served as a medical officer in the civil war and is credited with the organisation of a hospital corps that is yet in vogue both in the U. S. Army and the State National Guard.

Dr. Skeene returned to Brooklyn after leaving the military service and became a teacher of medicine in his Alma Mater, and later was appointed professor of gynecology in the same institution, retiring from active relations in the faculty of the Long Island Medical College about a year ago. He was a writer of distinction, did much original work in his special field, was a lover and patron of art, a sculptor of no mean ability, and was altogether a useful citizen and lovable man. He is survived by a widow and an adopted daughter.

The New York *Tribune* pays editorially in its issue of July 7th, a beautiful tribute to his memory, which we reproduce as follows:

A LOSS TO HUMANITY.

In the death of Dr. A. J. C. Skeene, of Brooklyn, the world sustains a grievous loss. The community loses an ideal citizen, a man who, with rare unselfishness and singleness of purpose, labored to lessen pain and suffering and to increase health and life—of whom, indeed, it might without irreverence be said that he lived and labored that others might have life and might have it more abundantly. Beginning his career with the creation of the now invaluable army ambulance service, he has closed it with the foundation of what was designed to be one of the noblest and most beneficent of charities. The profession which he adorned suffers a loss which is to be estimated by members of that profession more justly than by laymen. The world knows, however, of his rare judgment in diagnosis, his marvelous ability in surgical operation, and his authority as a teacher and writer, recognised wherever the English language and, indeed, most other civilised languages are used.

Most keen of all, perhaps, is the sense of personal loss which comes to innumerable former patients and to friends. His cheery humor, his spontaneous sympathy, his almost more than human tenderness and his unfailing and inspiring hopefulness must remain precious memories to all who have been ministered to by him. To more than a few, who have long leaned upon his strength and who have partaken of his generous bounty, it will now seem as if, in the words of Carlyle's sorrow, the light of their lives has gone out. For such a loss to humanity there could be no consolation were it not for the assurance that greater still has been the world's gain through the activities and achievements of his pure and exalted life.

DR. SAMUEL RUSSELL WELLES, U. of B. '48, of Waterloo, N. Y., died at his home in that village, July 15, 1900, aged 75 years. He was born at Waterloo, February 23, 1825, received the degree of A. B. at Geneva (now Hobart) College in 1845, and graduated in medicine at the University of Buffalo in 1848. He was appointed assistant surgeon in the 61st N.Y. Vols., March 8, 1862, and resigned his commission, July 25, 1862. This regiment was first commanded by Colonel (afterward Major General) Francis C. Barlow, and next by Colonel Nelson A. Miles, now Lieutenant-General and Commander-in-Chief of the Army of the United States. In 1875 Dr. Welles was elected a trustee of Hobart College and he has served two terms in the legislature, representing Seneca County.

DR. GEORGE W. LEWIS, of Buffalo, died at his home, 311 Delaware Avenue, July 24, 1900, aged 38 years. His death was sudden, having occurred at about 1 o'clock a. m. He went to bed a little before midnight in apparent health. He was one of the prominent younger homeopathic physicians and will be sadly missed among his large circle of friends. He was a nephew of Judge Loran L. Lewis, and his father, the late Dr. George W. Lewis, was one of a group of homeopathic physicians that were prominent for many years in this city.

Dr. Lewis attended the public schools and high schools here, and graduated at Cornell University in 1884. He graduated in medicine at a New York Homeopathic College, spent some time abroad in study and has been engaged in practice nearly fifteen years. He leaves a widow and two children.

DR. JOHN ASHURST, JR., of Philadelphia, Pa., died at his home, July 7, 1900, aged 61 years. His death was due to paralysis from which he had been afflicted for about two years. He was born in Philadelphia and graduated at the University of Pennsylvania in 1860. He served as a medical officer during the civil war. He was appointed professor of clinical surgery at his Alma Mater in 1877, and ten years later became professor of surgery. Dr. Ashurst was one of the best known American surgeons both as an author and teacher. He edited the International Encyclopedia of Surgery which appeared in 1881, besides contributing many valuable monographs to the literature of surgery.

SOCIETY MEETINGS.

THE American Association of Obstetricians and Gynecologists will hold its thirteenth annual meeting in the Assembly room of the Galt House, Louisville, Ky., Tuesday, Wednesday and Thursday, September 18, 19 and 20, 1900, under the presidency of Dr. Rufus Bartlett Hall, of Cincinnati, O.

The following-named papers have been offered:

1. President's address, R. B. Hall, Cincinnati.
2. Ovarian fibroma—case with microscopical report—L. H. Laidley, St. Louis.
3. Cholelithiasis—with report of cases—H. E. Hayd, Buffalo.
4. Appendicitis during pregnancy, Charles G. Cumston, Boston.
5. Diagnosis of ectopic pregnancy before rupture, based on ten cases, J. F. Baldwin, Columbus.
6. Three cases of extrauterine pregnancy, with specimens, W. B. Dorsett, St. Louis.

7. The private hospital, Joseph Price, Philadelphia.

8. Paper (Title undetermined), E. F. Fish, Milwaukee.

9. Paper (Title undetermined) C. C. Frederick, Buffalo.

10. Extirpation of the rectum and sigmoid per vaginam, John B. Murphy, Chicago.

11. Paper (Title undetermined) H. O. Pantzer, Indianapolis.

12. Paper (Title undetermined) J. H. Carstens, Detroit.

13. The hymen—of what significance is its presence or absence in determining virginity, John Milton Duff, Pittsburg.

14. Paper (Title undetermined) W. P. Manton, Detroit.

15. Paper (Title undetermined) F. Blume Pittsburg.

16. A satisfactory method for suspension of the uterus, Robert T. Morris New York.

17. Paper (Title undetermined) H. W. Longyear, Detroit.

18. Some points regarding surgery of the gall-bladder, A. Vander Veer, Albany.

19. Surgery of the liver and bile ducts, W. G. Macdonald, Albany,

20. Observations respecting malignant disease of pelvic organs. Augustus P. Clarke, Cambridge.

21. Paper (Title undetermined) M. Rosenwasser, Cleveland.

22. Bilateral celiotomy and shortening of the round ligaments for complicated retroversion of the uterus, A. Goldspohn, Chicago.

23. Paper (Title undetermined) W. B. Chase, New York City.

24. Paper (Title undetermined) Charles A. L. Reed, Cincinnati.

25. Round ligament ventrosuspension of the uterus, D. Tod Gilliam, Columbus.

26. Paper (Title undetermined) L. S. McMurtry, Louisville.

The titles of papers are announced in the order of their reception. The permanent program will be classified and issued about August 25, after which date no further titles can be added or changes made in the printed program.

A cordial invitation is extended to the medical profession to attend the several scientific sessions of the association.

THE Mississippi Valley Medical Association will hold its twenty-sixth annual meeting Tuesday, Wednesday and Thursday, October 9-11, 1900, under the presidency of Dr. Harold N. Moyer, of Chicago. At a meeting of the executive committee, held at Atlantic City, June 6th, the following were chosen to deliver the annual addresses: Dr. I. N. Love, of St. Louis, the address in Medicine; Dr. C. A. Wheaton, of St. Paul, Minn., the address in Surgery. The mere mention of these names is guarantee sufficient that the association will hear only the best.

Negotiations are in progress by which the members of the association may obtain a one-fair rate for the round trip for this meeting. The Southeastern Passenger Association has already granted this rate, and it is believed the Western and Central Passenger Association will concur. Due notice of this will be sent later.

It is earnestly requested that those desiring to read papers will send their titles to the secretary within the next thirty days. It is also requested that a brief synopsis of the paper of not less than twenty-five words accompany the title. Dr. Henry E. Tuley, 111 West Kentucky Street, Louisville, Ky., is the secretary.

The Buffalo Academy of Medicine requests all persons desiring to contribute to the program for the sessions of 1900-1901, to communicate with the officers of sections, as announced below, on or about August 1, 1900:

Section of Medicine—Eli H. Long, chairman; Julius Ullman, secretary, 400 Franklin Street.

Section of Surgery.—Marshall Clinton, chairman; Frederick H. Millener, secretary, 5 N. Pearl Street.

Section of Obstetrics.—Albert J. Colton, chairman; William G. Ring, secretary, 364 Niagara Street.

Section of Pathology—Eugene A. Smith, chairman; F. W. McGuire, secretary, 1540 Main Street.

Section of Ophthalmology, Otology, etc.—F. W. Hinkel, chairman; George F. Cott, secretary, 531 Mooney-Brisbane Building.

It should be remembered that a prize of fifty dollars is offered by Dr. Marcel Hartwig, president of the Academy, for the best paper presented to the Academy, by a Fellow thereof, during the session 1900-1901.

COLLEGE AND HOSPITAL NOTES.

The Kentucky School of Medicine celebrated its golden anniversary at its annual commencement held at Louisville, June 26, 1900. A program of great interest had been prepared, including an elaborate musical schedule, the conferring of the degrees upon the graduating classes by Hon. John H. Leathers, president of the board of regents, the announcement of honors by Dr. William H. Wathen, dean of the faculty. The event of the evening was the doctorate address delivered by Professor Roswell Park, of Buffalo. Dr. Park, always an interesting speaker, was unusually so on this occasion and his address abounded with graceful rhetoric and eloquent periods. The ceremonies were every way worthy of the occasion, upon which the Kentucky School of Medicine is to be congratulated.

THE Albany Hospital graduated the first class from its training school for nurses, May 10, 1900. The occasion was one of great interest to the friends of the hospital, which is one of the oldest and most famous in the country. Thirteen young women who had taken the three years' course of hospital training under the direction of the superintendent of the training school, Miss Emily MacDonnell, received diplomas.

Dr. A. Vander Veer, Surgeon-in-Chief of the hospital, delivered an address to the class which was frought with interest and eloquence, and Mrs. Hunter Robb, of Cleveland, O., also addressed the assemblage. The diplomas were conferred by Judge William L. Learned, and after the ceremonies the hospital was thrown open to guests, members of the medical staff and nurses acting as a reception committee, and in the Nurses' Home an elaborate luncheon was served.

Book Reviews.

DISEASES OF THE STOMACH, THEIR SPECIAL PATHOLOGY, DIAGNOSIS AND TREATMENT. With Sections on Anatomy, Physiology, Chemical and Microscopical Examination of Stomach Contents, Dietetics, Surgery of the Stomach, etc. By JOHN C. HEMMETER, M. D., Professor in the Medical Department of the University of Maryland, Baltimore. With many original illustrations, a number of which are in colors. Second edition, enlarged and revised. Octavo, 898 pages. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1900. [Price, $6.00 net, cloth.]

About two years ago (May, 1898,) we noticed the first edition of this book in extenso. It was the first American treatise to deal with the subject exhaustively, or with sufficient comprehensiveness to entitle the work to be classed in the text-book group.

This new edition follows the general plan of the first in its make-up, as well as in the method of its treatment of the several branches of the subject matter considered in the book. After dealing with the anatomy and physiology of the digestive organs, the therapy and materia medica of digestive diseases, and the surgical treatment of organic gastric disorders, Hemmeter then takes up special diseases of the stomach in a section of the work, called the gastric clinic. This comprises about one-half the bulk of the volume, as it did in the first instance. It deals with gastritis, both acute and chronic, ulcer of the stomach, malignant tumors, tuberculosis and syphilis of the stomach, benign tumors, motor insufficiency, hemorrhage, enteroptosis, neurosis of the stomach, achylia gastrica, nervous dyspepsia, etc., etc.

This is a practical part of the work and in many instances the author is both original and ingenious in his methods of diagnosis and treatment. The importance of an intimate knowledge of diseases of the stomach is a growing necessity, and every contributor to the sum of this knowledge should have a patient ear and an inquiring mind for an auditor in the person of the general practitioner of medicine. It is to him that this work appeals in particular, yet the abdominal surgeon may not neglect it, for it contains much with which he must become familiar before he can call himself well-equipped to do the surgery of the stomach.

This second edition of Hemmeter is practically a new treatise, since so much of it has been rewritten, and all of it has practically been reconstructed. Moreover, much new material has been added, among which the more important articles are: hypertrophic stenosis of the pylorus, obstruction of the orifices, use and abuse of rest in the treatment of digestive diseases, and parts of chapters on other subjects.

New illustrations and plates, too, have been added in order to carry it forward to the immediate present in its teachings. Progress has been so rapid in this topic, and is continuing to move ahead with so much speed, that one must needs watch the literature of it carefully. Divested of the necessary sentiments attached to the prefaces and the forepages expressed in fable and poetry, we regard the book as of the best on the stomach and its diseases that have issued from an American press and by an American author. The indices of authors and subjects are most complete—a very important part of a good book.

THE INTERNATIONAL MEDICAL ANNUAL AND PRACTITIONERS' INDEX. A Work of Reference for Medical Practitioners. Eighteenth year. New York: E. B. Treat & Co., 241–243 West 23d Street. 1900.

The appearance of the Annual is looked forward to with much expectancy and pleasure, by all those acquainted with its variety of news and illustrations on subjects of great import to the medical mind. It serves to keep one abreast of the times in everything pertaining to the profession, and therefore is a welcome addition to the library.

The present volume is up to the high standard of preceding volumes and is full of new information and richly adorned with beautiful full-page plates.

Part I. is devoted to therapeutics and opens with a dictionary of new remedies and a review of therapeutic progress for 1899. The introduction of new organic compounds goes merrily on and such absurd extracts as neurine and choline, taken from the cerebro-spinal fluid removed from cases of brain atrophy, and particularly from general paralysis of the insane; and the extract from the ciliary body of the ox are announced, the latter have been employed in cases of sympathetic ophthalmia. Among the newer drugs fully reviewed are heroin, holocaine, protargol and the various toxins. An interesting review of the progress in *x*-ray work during the past year then follows. The importance of *x*-ray work in the South African campaign is reviewed and its great importance in such cases fully noted.

Under Part II., new treatment is met, the familiar encyclopedic presentation of the progress achieved during the past year. Some of the subjects aré treated at length and serve as monographs—such for instance is the article on Cancer by Keith W. Monsarrat, who goes quite extensively into the pathology of cancer and illustrates his findings by beautiful colored plates. For instance, the plate showing the method of spore formation in the organism is clear and nicely shown. The article on mycetoma is well described and accompanied by full-page illustrations.

The notes on legal decisions are of much interest to physicians, dentists and pharmacists and are prepared by W. A. Purrington of the Bellevue Hospital Medical College. Dr. Joseph Priestly contributes his annual review on the progress of sanitary science.

The closing chapter, as in the preceding numbers, gives a list of the principal medical works published during the year, chiefly American.

To all who have the preceding volume this number needs no introduction, to those not fortunate enough to possess them, the volume of 1900 is an excellent one to start with. W. C. K.

THE REFRACTION OF THE EYE, INCLUDING A COMPLETE TREATISE ON OPHTHALMOMETRY. A Clinical Text-book for Students and Practitioners. By EDWARD DAVIS, A. M., M. D., Adjunct Professor of the Eye in the New York Post-Graduate Medical School and Hospital; Assistant Surgeon to the Manhattan Eye and Ear Hospital; Attending Ophthalmic Surgeon to the Babies' Wards of the New York Post-Graduate Hospital; Attending Ophthalmic Surgeon to Bellevue Hospital Out-Door Department; Secretary of the New York Ophthalmological Society; Assistant Secretary of the New York Physicians' Mutual Aid Association; Member of the New York State Medical Society, County Medical Society, Academy of Medicine, etc. With 190 engravings, 97 of which are original. Duodecimo, pp. xiv.—432. New York and London: The MacMillan Company. 1900. [Price, cloth, $3.00.]

Dr. Davis has here written especially for students. His work embraces a full description of the ophthalmometer and gives detailed instruction as to using it. The author also describes, minutely, his methods of determining errors of refraction, and cites 150 cases in illustration. The description of the ophthalmometer is excellent, and the methods of estimating and correcting errors of refraction are in the main as serviceable as any that can be adopted without using a cycloplegic. A few illustrative cases are often helpful, but the utility of so large a number as are here introduced is questionable, even with the aid of the author's index to them.

Throughout the book, the author has endeavored "to show the utter uselessness of a mydriatic in fitting glasses in a vast majority of cases, even in young subjects," and in the measurement of astigmatism he relies largely on the readings of the ophthalmometer. In both his hospital and private practice he does not find it necessary to "use a mydriatic in more than 1 per cent. of all cases of refraction," urging that "when we take into account the time and great annoyance saved to the patient by not using atropine, we can readily see the advantages of the ophthalmometer." But many painstaking and clear-headed observers have demonstrated repeatedly that the readings of the ophthalmometer are, at the best, only suggestive, and that the final subjective findings show, altogether too frequently, a marked variation both in the degree of astigmatism and in the direction of its axis—a variation that counts seriously against the power to estimate the total ocular astigmatism by ascertaining the corneal astigmatism by means of any instrument whatsoever. As to the use of atropine, the author seems to assume that this is the only available cycloplegic; and if it were, others would readily join him in discouraging its use. But with other cycloplegics at hand, whose disabling effects are so transient, his objection to "a mydriatic" has but little weight. Most ophthalmologists use atropine very rarely in refractive work, as homatropine is generally all-sufficient. The duration of its effects is brief, it quite fully relaxes the accommodation, an examination is made much more expeditiously, the errors of refraction are determined at once and with greater certainty, the patient is saved the time by making several visits and the ophthalmologist is far more sure of a diagnosis by which he is guided to the proper treatment.

The author's teachings are summarised on page 41 as follows: "(1) Use the ophthalmometer; (2) Use trial lenses and test cards; (3) Use the ophthalmoscope; (4) If after two tests on different days the result is still unsatisfactory, employ a mydriatic and use the retinoscope in addition to the other tests."

Those who would inform themselves in regard to the views and methods of those who plead for the reliability of the ophthalmometer, and who try to belittle the need and helpfulness of a cycloplegic in determining errors of refraction in subjects with active accommodation, may read this book; but it is an unsafe guide to those who desire to learn how to do refraction work with expedition and accuracy.

A. A. H.

ANNUAL AND ANALYTICAL CYCLOPEDIA OF PRACTICAL MEDICINE. By CHARLES E. DEM. SAJOUS, M. D., and 100 associate editors. Assisted by corresponding editors, collaborators and correspondents. Illustrated with chromo-lithographs, engravings and maps. Volume V. Methyl-Blue to Rabies. Philadelphia, New York and Chicago: F. A. Davis Co. 1900.

This volume adds to the previous reputation of Sajous's Annual in its present form, and is one of the most important of the series. It embraces nearly all the specialties, containing as it does articles in otology, laryngology, ophthalmology, pediatrics, obstetrics, therapeutics and others, as well as sections classed under the head of general medicine and surgery.

The editor invites special attention to the articles on nursing and artificial feeding by Holt and Fetra; disorders of pregnancy, by Currier; abnormal parturition, by Grandin and Marx; pleurisy, by McPhedran; catarrhal pneumonia, by Solis-Cohen, and lobar pneumonia, by Ashton. In the section on nursing and artificial feeding, we are surprised to find no reference to the service Ernest Wende has rendered in the suppression of the long-tube nursing bottle, although under the sub-head, "Bottles and Nipples," the importance of attention to the feeding receptacle is referred to and the long rubber tube is condemned, quoting Rothschild on the subject. As a matter of fact the glass tube is equally dangerous as has been repeatedly pointed out by Wende, and demonstrated by photo-micrographs and otherwise. Indeed, an ordinance is in force in Buffalo prohibiting the sale of the long-tube nursing bottle, the only city within our knowledge where such action has been taken. The result has been a diminution of the infantile death-rates of more than 50 per cent.

Of special interest in Buffalo and vicinity is the subject of rabies, in view of the epidemic that has recently existed. The article on rabies, by Bondurant, is a résumé of our present knowledge of the subject. It is surprising how sparse the literature of rabies is, but it is probable that it will soon increase as Wende is also devoting much attention to this subject having recently presented some results of his studies to the American Medical Association at its Atlantic City meeting.

Taken together the subjects presented in this volume are unsurpassed in their interest and importance by any of the previous numbers of the series. It is one of the most satisfactory works of reference we possess, and further emphasises the wisdom of the editor in changing the plan of publication of his Annual to the present form.

ATLAS AND EPITOME OF SPECIAL PATHOLOGIC HISTOLOGY. By Docent Dr. HERMANN DURCK, Prosector to the Municipal Hospital, Munich. Edited by LUDVIG HEKTOEN, M. D, Professor of Pathology in Rush Medical College, Chicago. Sixty-two colored plates. Philadelphia: W. B. Saunders. 1900. [Price, $3.00.]

This is the latest volume in the Saunders series of Medical Hand-Atlases and it is in keeping with the previous issues. Pathologic histology is a subject of the utmost importance and interest and it is presented here in a manner which is both instructive and pleasing. The plate work is not alone excellent; it is beautifully artistic and, what is more, absolutely correct, so that one studying reproductions can learn quite as much apparently as by viewing the prepared tissues under the microscope.

The main idea which stands out brilliantly throughout the work is to present to the student those changes which are typical of a certain process and the illustrations have been most carefully selected with that end in view.

A study of the plates shows that great and unusual care was exercised by the author in selecting the most typical views of the various processes and in no instance is there the slightest suspicion of schematic representation; on the contrary, so carefully has the work been prepared that the "combinations" of various areas has been studiously and religiously avoided.

In this volume, which is the first of three covering the subject, there are taken up the organs of circulation, the respiratory organs and the digestive organs. The second volume which will issue shortly will complete the subject of special pathologic histology. The third volume will deal with general pathologic histology.

ECKLEY'S PRACTICAL ANATOMY.

NOTE OF CORRECTION.—In the review of Eckley's Practical Anatomy, page 941, July, 1900, it is stated that "the book is a valuable guide to Gerrish's Anatomy" which is an error. As a matter of fact the work is based upon Morris's Anatomy and we regret that our review notice did not contain a definite statement to that effect. We avail ourselves of this opportunity to do all in our power to correct the erroneous statement which we inadvertently published.

BOOKS RECEIVED.

A Manual of Operative Surgery. By Lewis A. Stimson, B. A., M. D., Professor of Surgery in Cornell University Medical College. New (4th) and thoroughly revised edition. In one royal 12mo volume of 581 pages with 293 illustrations. Just ready Cloth, $3.00 net. Philadelphia and New York: Lea Brothers & Co. 1900.

Diseases of the Eye. By Edward Nettleship, F. R. C. S., Ophthalmic Surgeon at St. Thomas' Hospital, London; Surgeon to the Royal London Ophthalmic Hospital, etc. New (6th) American from the sixth English edition. Thoroughly revised by William Campbell Posey, M. D. With a supplement on the detection of color blindness by William Thomson, M. D, Professor of Ophthalmology in the Jefferson Medical College, Philadelphia. Just ready. In one 12mo volume of 562 pages, with 192 illustrations. Selections from Snellen's test-types and formulæ and 5 colored plates. Cloth, $2.25 net. Philadelphia and New York: Lea Brothers & Co. 1900.

A Manual of Surgical Treatment. By W. Watson Cheyne, M. B., F. R. C. S., F. R. S., Professor of Surgery in King's College, London; Surgeon to King's College Hospital, etc. And F. F. Burghard, M. D. and M. S. (Lond.), F. R. C. S., Teacher of Practical Surgery in King's College, London; Surgeon to King's College Hospital, etc. In seven imperial 8vo volumes, with illustrations. Volume III., 305 pages, with 100 illustrations. Cloth, $3.50, net. Philadelphia and New York: Lea Brothers & Co. 1900.

Fractures. By Carl Beck, M. D., Visiting Surgeon to St. Mark's Hospital and to the New York German Poliklinik. With an appendix on the Röntgen Rays. Octavo, pp. 335; 178 illustrations. Price, $3.00, net. Philadelphia: W. B. Saunders & Co. 1900.

Essentials of Medical and Clinical Chemistry. With Laboratory Exercises. By Samuel E. Woody, A. M., M. D. Fourth edition, revised and enlarged. Illustrated. Price, $1.50. Philadelphia: P. Blakiston's Son & Co. 1900.

A Treatise on Appendicitis. By John B. Deaver, M. D., Surgeon-in-Chief to the German Hospital, Philadelphia Second edition, Thoroughly revised and considerably enlarged. Illustrated, with 32 full-page plates. Octavo, $3.50, net. Philadelphia; P. Blakiston's Son & Co. 1900.

Food for the Sick and How to Prepare It. With a Chapter on Food for the Baby. By Edwin Charles French, M. D. Price, $1.00. Louisville: John P. Morton & Co. 1900.

A Manual of Clinical Diagnosis by Microscopical and Chemical Methods. For Students, Hospital Physicians and Practitioners. By Charles E. Simon, M. D., Late Assistant Resident Physician Johns Hopkins Hospital, Baltimore. In one very handsome 8vo volume of 563 pages, with 136 engravings and 18 full-page colored plates. Cloth, $3 50, net. Philadelphia and New York: Lea Brothers & Co. 1900.

A Dictionary of Medicine and the Allied Sciences. Comprising the Pronunciation, Derivation and Full Explanation of Medical, Pharmaceutical, Dental and Veterinary Terms; together with much collateral descriptive matter, numerous tables, etc. By Alexander Duane, M. D., Assistant Surgeon to the New York Ophthalmic and Aural Institute; Reviser of Medical Terms for Webster's International Dictionary. New (3d) edition. In one large square 8vo volume of 656 pages, with 8 full-page colored plates. Cloth, $3 00, net; full flexible leather, $4.00, net. Philadelphia and New York: Lea Brothers & Co. 1900.

A Text-Book of Practical Medicine. By William Gilman Thompson, M. D., Professor of Medicine in Cornell University Medical College, New York City, Physician to the Presbyterian and Bellevue Hospitals, New York. In one magnificent 8vo volume of 1010 pages, with 79 engravings. Cloth, $5.00, net; leather, $6.00, net; half Morocco, $6.50, net. Lea Brothers & Co, Publishers. 1900.

Transactions of the Associated Physicians of Long Island. June, 1898, to January, 1900. Volume I. Edited by Robert J. Morrison, M. D.

Transactions of the Medical Association of Central New York. Thirty-second annual meeting, held at Syracuse, N. Y., October, 1899. Wm. C. Krauss, M. D., Editor. Volume VI. Buffalo: Buffalo Medical Journal Print. 1900.

Transactions of the American Association of Obstetricians and Gynecologists. Volume XII. For the year 1899. Edited by William Warren Potter, M. D., Secretary. Philadelphia: W. J. Dornan, Printer. 1900.

LITERARY NOTES.

An Appendix to the International Directory of Laryngologists and Otologists, compiled by Mr. Richard Lake, is in course of preparation. In it will be found corrections of names and addresses already given, an additional list of names and addresses received since publication, and an obituary list.

. . . . . Considerable additions have been obtained for the foreign list, which will materially add to its value and completeness.

The decision of the Editors of the *Journal of Laryngology, Rhinology, and Otology*, under whose auspices the Directory is published, to allow no name to be inserted in the British list for which sanction has not been given in writing, at once explains some omissions and criticisms. The editors, whilst desirous of making the directory as complete as possible, consider it best to adhere to this course. It is therefore hoped that all engaged in the practice of laryngology, rhinology and otology will assist as far as possible in making this useful work complete, by sending in their names and addresses to the Editor, International Directory of Laryngologists and Otologists, 129, Shaftesbury Avenue, London, W.C., Eng.—*Journal of Laryngology, Rhinology, and Otology*, April, 1900.

HOWARD CHALLEN, of 150 Nassau Street, New York, is arranging an exhaustive list of periodicals, medical books, etc., for ready reference. Mr. Challen is the publisher, also, of registers for the use of publishers, such as subscription and advertisers' records, as well as other labor-saving books of a similar kind.

WARNER'S new therapeutic reference book is one of the very few guides of its kind now offered to students and busy practitioners, and must not be confused with Warner's Therapeutic Reference Book. The latter has been discarded, the new one taking its place. As its preface states it is not intended to teach graduates anything about therapeutics, but it is to be regarded rather as a handy aid to the memory. Many valuable tables are represented, including the metric table, thermometric equivalents, etc., useful tests for various matters, including urinary tests for albumin, sugar, etc., comparative values of certain goods, a complete dose table of drugs, a list of diseases and their remedies, hints as to indications of pregnancy, recommendations as to post mortem examinations, etc., etc. The brief mention above gives a suggestion of the many valuable departments of this new book.

It is bound in two styles, one leather, at 50 cents, and the other leatherette, at 25 cents per copy, postage prepaid in both instances. Address the publishers, William R. Warner & Co., Philadelphia, Pa.

THE Essentials of Hematology is the title of a handsomely printed brochure recently published by the Palisade Manufacturing Company, of Yonkers, N.Y. Its purpose is to present a brief review of the actual status of blood work as well as a concise and practical guide for a physician who desires to do a little work on his own account. It gives a description of the needed instruments, their methods of use and a few simple ways of staining. Then follows a brief description of the blood in primary and secondary anemia, leukemia, and malaria, to which is added a chapter on Widal's test for typhoid fever. It is handsomely illustrated, contains much useful information in condensed form and will be supplied on application to the publishers.

MOSQUITOES and Malaria is the title of a pamphlet published by McKesson & Robbins, of New York. Its object is to set forth the rôle played by the mosquito in the transmission of malarial fever. It gives much useful information in concise form, is well illustrated and will be furnished by the publishers upon application.

THE twenty-fourth year book of the United States Reformatory at Elmira for the fiscal year ending September 30, 1899, is a well printed brochure of 109 pages. It contains the reports of the several officers of the institution, a few illustrations, and in editing, typography, illustration and binding is solely the product of prisoners' labor.

ITEMS.

THE *Medical Mirror*, of St. Louis, offers $1,000 in prizes for essays on tuberculosis, to be distributed as follows: $500, $200, $100, and four prizes of $50 each. The following prominent gentlemen have accepted appointment on the committee on awards: Dr. Wm. Osler, Baltimore, Md.; Dr. George F. Butler, Chicago, Ill.; Dr. A. R. Kiefer, St. Louis, Mo.; Dr. C. Lester Hall, Kansas City, Mo.; Dr. H. R. Hall, St. Louis, Mo.; Dr. Lewis E. Lemen, Denver, Col.; Dr. Jos. M. Mathews, Louisville, Ky.; Dr. W. W. Grant, Denver, Col.; Dr. Thos. Hunt Stucky, Louisville, Ky.; Dr. Hugo Summa, St. Louis, Mo.; Dr. Walter Wyman, Washington, D.C. Entries close October 1, 1900, and the award is to be made January 1, 1901, giving the contestants three months in which to prepare their papers and to include clinical reports. The points for consideration in each paper with a percentage attached will be as follows: General considerations of the subject, 10; pathology, bacteriology and diagnosis, 20; clinical reports, 20; prognosis and treatment, 35; conclusions with résumé, 15. The *Mirror* hopes to develop from this discussion the fact that much more can be done for tubercular patients than the average practitioner believes, and is aiming to elicit all facts that may be of value in the treatment of this disease.

MESSRS. BATTLE & CO., of St. Louis, are sending out a picture illustrating the tortures of the gout. It is a copy of a drawing published May 14, 1799, by H. Humphrey, 27 St. James Street, London. To be appreciated it must be seen. The publishers will gladly send the engraving to any physician who may request the same by addressing a line to Messrs. Battle & Co., Chemist Corporation, 2001 Locust Street, St. Louis.

MESSRS. REED & CARNRICK have recently added complete physiological, chemical, pathological and bacteriological laboratories to their plant at 42 to 46 Germania Avenue, Jersey City, N.J. The members of the American Medical Association on their way home from the Atlantic City meeting were invited to visit these laboratories. Those who accepted were received by Dr. Warner, who with his assistants showed the visitors through the several rooms and explained the work that was being done in them. The apartments are tiled in white and are supplied with all apparatus and instruments necessary to do accurate work in physiology, pathology, chemistry and bacteriology. The complete accessories, microscopic instruments, incubators, etc., are of the best make, and were furnished by the reliable and old-established firm of Queen & Co., of Philadelphia, Pa. The profession is invited to submit specimens and to investigate the laboratories. Fees for examination are very moderate; they may be had on application. Physicians passing through Jersey City and having the spare time to take a few minutes' ride on the Turnpike trolley may spend a delightful hour at the laboratories.

ATTENTION is invited to advertising p. xxx., on which will be found two "For Sale" notices that will interest physicians either in search of a location or in want of an outfit, such as books, instruments and office furniture.

NOTICE.—All Surgeons, Assistant Surgeons, Acting Assistant Surgeons or Contract Surgeons, and Hospital Stewards, who served in the Army or Navy of the late Confederate States, will please send their post-office address to Deering J. Roberts, M.D., Secretary Surgeons' Association, C.S.A., Nashville, Tenn.

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Original Communications.

PRACTICAL HYGIENE.[1]

By HENRY R. HOPKINS, M. D., Buffalo, N. Y.,

Professor of hygiene, University of Buffalo; chairman committee on hygiene, Medical Society of the State of New York.

THE compliment and pleasure of an invitation to address your honorable body is more highly appreciated and becomes more of a red-letter event to me from the fact that it was my good fortune to spend the years of my boyhood in this most favored county. Wander where he may the sky is never so blue, the foliage never so fresh, the smile of friendship never so charming as in his native land, and Chautauqua is the land of my birth.

My purpose is to speak to you upon some of the points in hygiene that it would seem should be of special interest to those who have the onerous duty and responsibility of medical advisers to a rural people. The art of hygiene is most uniform in its aims and objects, but the demands upon that art of our people who live in our cities and towns, and of our people of rural life differ as the details of their several environments.

You will perhaps indulge me in a single observation of a general character as to the status of the work of hygiene at this time. Look where he may the student of hygiene finds cause for encouragement; the laboratory, the journal, the text-book, the field of battle, the camp, the battleship, the transport, the school, the theatre, the auditorium, the urban home and the rural home, the operating-room and the lying-in chamber, the sick-room everywhere gives evidence of the benign life-saving and hope-giving work of an improved, a more precise, a more efficient hygiene. On every hand opinion and uncertainty are giving way to conviction and precise methods, and on every hand the results in preventing disease and lessening mortality are most encouraging and stimulating to yet greater effort and higher aims.

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[1] Read at the annual meeting of the Medical Society of the County of Chautauqua, July 10, 1900.

In the State of Michigan the records show that between the years 1887 and 1894, there were 738 outbreaks of scarlet fever and diphtheria, with an average of more than thirteen cases of illness to each outbreak. Since 1894 with improved methods of notification, isolation and disinfection, there have been 412 outbreaks with an average of cases to each outbreak of less than 3. In the City of Buffalo during the four years ending with 1884, there were 1696 deaths from scarlet fever and diphtheria; while for the four years ending with 1898 there were 838 deaths from these diseases. In this period from 1884 to 1898, the population of Buffalo has doubled and the mortality from scarlet fever and diphtheria has been lessened by one-half. During the American-Spanish war there was not a single death reported from contagious or infectious disease from our navy, and that notwithstanding the fact that the men were exposed to the burning heat of summer in the torrid zone.

Let us bow down to the faithful men whose patient, modest and scientific investigations have laid so sure a foundation for that most beneficent of all the handmaids of human progress, the science and the art of hygiene.

I wish now to invite your attention to some observations upon the hygienic management of three of our more pervalent and important diseases, it being my purpose to emphasise with greater particularity those points in the management of such diseases as relate to the responsibility of medical practitioners among rural people. For this purpose we will consider tuberculosis, typhoid fever, and scarlet fever.

TUBERCULOSIS.

Tuberculosis concerns us from its universal prevalence and enormous death-rate, and it never seems amiss to repeat that which we so well know, that this disease causes about one-seventh of all our mortality; that the annual mortality in the State of New York is 13,000, and that of this vast caravan, which with steady, unbroken and unending tramp day by day, month by month, and year by year, without hope or expectation, march to untimely graves, our rural population furnish their full quota.

The discovery of the bacillus of tuberculosis seems destined to play an important part in shaping our notions of the therapeutics of tuberculosis, as it has already done in transforming our ideas as to its pathology and etiology. We do but state our common beliefs and fears when we remind you that if not now, certainly in the near past the prognosis of tuberculosis was hopeless. In this statement I do not forget the rare cases—the exceptions to the usual experience—but have in mind the vast mortality—the common dread, the popular hopelessness.

We have been accustomed to say when driven to it: Sir, I fear you have consumption; and we are accustomed to hear from the ashen lips of the condemned: Doctor, how long can I live?

Gentlemen, since the angelic message at Bethlehem, telling of the birth of the Christ, there has been no more hopeful gospel to mankind than that of Koch's bacillus, whereby the diagnosis of consumption may be made early in the disease; made months and years earlier than we are used to make it, or dare to speak the word; made at a time when the disease is curable; and curable in the large majority of cases—curable by the simple use of God's great remedies—hope, pure air, sunlight and plain food. It is our great privilege to hear these good tidings of great joy, and to bear an honorable part in this hope-giving life-saving campaign.

These observations apply to us as to all members of the medical profession, but there are others to which I would urge your attention, that more especially concern ourselves. Experience, observation and experiment unite in the demonstration that tuberculosis may be acquired by the lower animals, those more frequently found upon the farm, whose flesh and other products are used for human food. The spread of consumption from man to the domestic animals and from these animals back to man, indicates that the responsibility of the medical man of rural practice in regard to tuberculosis is three-fold; he must so manage cases of this disease that the sufferer may have his chance for recovery, so control the infection that it may not spread to the family or friends, and furthermore, that the infection may not spread to any member of that larger family the fowls and domestic animals of the farm. Fortunately, to do all this imposes neither hardship nor complicated and exacting regimen. The suptum must be recognised as the infecting medium; must be received in a suitable receptacle, and must be promptly destroyed. When it becomes generally known that the dry sputum of the consumptive is as dangerous as the falling scab of small-pox, the intelligence of the people may be trusted to find suitable means for their protection and its destruction.

Positive convictions upon the part of the members of our profession as to the communicability of tuberculosis and as to the various ways whereby such communication is effected, is the first step yet to be taken in this most important life-saving crusade.

TYPHOID FEVER.

The case against typhoid fever may properly be introduced with the important and startling observation that typhoid fever in this State is a rural disease; that the bacillus typhosus, whose habitat and ravages were formerly associated with the dirty and crowded camp, the filthy and unventilated tenement house and transport ship is now chiefly at home in the smaller villages and farms of that part of our country, the rural districts, where a large part of our whole people dwell, where we are accustomed to think of the conditions of living as absolutely hygienic.

The health authorities of the State of New York, in order to the more intelligent study of the public health, divide the State into eight sanitary districts. These several districts present a wide variety of conditions known to be important factors in determining the morbility and mortality of the people.

The Maritime or first sanitary district has a population of 1,535 to the square mile, and of this population 90 per cent. are urban. Of all the districts this is the more densely populated and has the higher percentage of urban population.

The other extreme of condition is found in the Adirondack or third district, where the density is reduced to 26 to the square mile, and of these only 7 per cent. are urban. Between these extremes the conditions of the other districts are found and present a more uniform environment.

The experience as to the mortality from typhoid fever is uniform in this respect, that of a 1,000 deaths from all causes the number from typhoid fever is constantly higher in the districts having a larger proportion of rural population. The picture of the last year is practically good for the ten years last past, and that gives the Maritime district out of each 1,000 deaths 8 per cent. of typhoid fever, and the Hudson Valley district, 20 per cent. from the same cause.

The latter district has for many years had the highest typhoid mortality in the State—18, 17, 15, 16 per cent. are the proportions of some of the other districts, 16 per cent. being that of our own, known as the Ontario and Western district. You will bear in mind this is not a vagary of a single season, the effect of some temporary cause, but the average experience of many years and seems to indicate that the country well is frequently too near to the privy. That the bacillus typhosus has found a congenial home in "the old oaken bucket, the iron-bound bucket, the moss-covered bucket, which hangs in the well."

The experience of the State seems to be likely to follow that of twenty years or more ago of the City of Buffalo. Typhoid was epidemic throughout the entire year, and intelligent opinion began to indite the city well. This was before the days of bacteriology, but was not before the days of the chemical analysis of drinking water, and such analysis showed that our wells were rich in ammonia of albuminoid origin; that that ammonia was of human origin; that it was the product of human excrement; that our wells and our deepest wells where the dependent places into which the soil saturated with the overflow from the privies and sewer leaks was being drained, and our practical medical men, guided by their artistic instincts declared: that this is a sufficient demonstration—the drinking of this polluted water causes typhoid fever and these wells must be closed in the interests of public health! The wells were closed, our people were forced to use the pure water of the Niagara river, and our death-rate from typhoid fell most satisfactorily. Years afterward the discovery of the bacillus typhosus gave the means of making a scientific demonstration of what was before an artistic conclusion, and what was possibly more important, gave an important testimony to the nature of the operation of the mind that the mind can and does reach a true conclusion even in the absence of some important links in the evidence.

And what are the conclusions that we are to draw from the astonishing fact that in the State of New York typhoid fever has been for years and is a rural disease. Starting from the thorough conviction of clinicians and laboratory workers that typhoid fever is a water-borne disease, we will be correct in our finding that the farm well is the main source of danger from this disease, and that the farm well must be protected from ground water carrying in suspension or in solution the products of human excrement. Again, that rural practitioners of medicine must be more careful in their diagnosis; that they must treat fewer cases of simple fever, of bilious fever, of malarial fever, of autumnal fever, of biliousness, of indigestion with fever, because it is worth while to be right and these diseases are rare and infrequently seen. Again, rural physicians must see more cases of typhoid fever, because to treat these cases without seeing their true infectious character is to neglect to take those simple and inexpensive hygienic precautions to neglect to sterilise the typhoid dejecta, to fail to prevent the infection from spreading, and is to become responsible for the poisoning of the well, the poisoning of the spring, the poisoning of the stream at its source; and we must not forget that if the spring, the head waters of the stream are poisoned with the bacillus typhosus, whoever drinks of that spring or of that water course, miles and miles below, drinks to his death.

Again, it is worth while to remember that the farm is the source of the food supply, and as we have before seen that it is inexpedient that the farm should send to market tuberculous poultry, tuberculous meat, tuberculous milk, so likewise is it inexpedient that the farm should send to market vegetables, fruits or other farm products which have been washed in water infected with bacillus typhosus. And, lastly, the farm is the home of the dairy, the source of one of the chief foods of all, and the principal food of the young and susceptible, cow's milk. Experience amply demonstrates that it is important that milk cans be washed and rinsed in clean water, and fair-play would seem to demand that if we must have our milk watered, that the doctor should at least see to it that the diluent be free from the infection of typhoid.

I must close this part of my subject, but will leave in your minds Osler's vigorous etching: "This is God's country, with man's back-yard and the devil's cesspool."

SCARLET FEVER.

I have selected this disease as the topic of final remark for the double reason that it would seem that something should be said of our hygienic treatment of it, and that we have a special responsibility from our field of work. It has previously been observed, as a cause for congratulation, that in many particulars the work of the bacteriologist has given precision to the knowledge and work of the hygienist, notably so in our knowledge of the bacillus of consumption and the bacillus of typhoid. Precise knowledge of how these infections leave the body, how they spread and communicate their different diseases after leaving the body has given us an accurate method in the management of such cases. We know that it is not essential to quarantine and isolate cases of consumption and typhoid fever. We know that it is only essential to sterilise the sputum of the consumptive, to sterilise the dejecta of the typhoid, and that this being done that the sufferer may remain at home or in the general ward of the hospital without danger to others. Regarding scarlet fever we are still obliged to confess that its specific principle has not yet been detected and therefore that our knowledge of it is wanting in scientific foundation, but it seems to me that our practice in these cases is scarcely up to the beliefs of those of us who have given the disease the more careful study.

Speaking from study and from observation it is my belief that scarlet fever is during its first days, before the beginning of desquamation, but feebly contagious and not at all infectious; that it becomes infectious with the peeling and that the infection leaves the body chiefly or only in this manner. My practice has for many years been governed by these beliefs and ample experience seems to justify the method.

Scarlet fever and measles are quite closely associated in the minds of both profession and laity and in hygienic management and curative treatment we are wont to think of them along similar lines; while the fact is they have nothing so conspicuous as their contrasts and may be treated with widely differing hygienic methods. Scarlet fever is infectious; measles is not. Measles is highly contagious, scarlet fever feebly so, if at all. The invasion of scarlet fever is abrupt, explosive; that of measles is slow, frequently lasting days or a week. The period of incubation in scarlet fever is short—three to five days; that of measles long—ten to fifteen days. Isolation to be of any use should be enforced in measles from the exposure, or at the end of the period of incubation, while in scarlet fever it is efficacious at any time during the early days of the eruption. With the coming of the eruption in measles the communicability of the disease seems to be over; in scarlet fever the fading of the eruption shows that the period of communicability is about to begin.

These notions regarding scarlet fever result in hygienic methods, to which I would briefly invite your attention. The principle of isolation is the more important principle of preventive medicine, and in no disease is isolation more adapted than in this. The art of hygiene is so advanced that our standard should be, that save in cases of general infection, there should not be the second case of scarlet fever in any family where the case comes under observation during the first week of the disease. Over and again, the situation is repeated. There are half a dozen children in the family, they all play in the same room, they all sleep in the same room and frequently two or three of them sleep in the same bed. One is taken ill in the night; you see the case the next day, and find it well out with the rash; you make your diagnosis and suggest isolation and the mother says: how useless, they have all slept in the same chamber, and two in the same bed. Too frequently we give way to the objection, fail to isolate the case and have six cases where there need be only one. Isolation should be practised in all cases of scarlet fever and may be depended upon to prevent the spread of the disease at any time before the stage of desquamation. Furthermore, hygienic treatment, preventive measures, may properly be instituted from the first. We do not know the microbe of scarlet fever, but we have every reason to believe that there is one and that it is susceptible to the attack of disinfectants and germicides, as are the microbes of the other infections, and from the first day of treatment measures should be instituted to disinfect the skin, and more particularly the portions of the surface covered by hair.

The stage of desquamation comes when it will, at variable periods, and to get ready for this process is the most essential part of the hygienists duty. In this part of our work, we may be guided by what we know and by what we believe. We know the infection leaves the body in the bran-like scales of epidermis, and we know that the lighter these scales are the further the air currents will be able to carry them. Knowing this we begin our effort to limit the sphere of infection of a given case, by rubbing the body several times each day with lard or some other oily substance for the single purpose of loading the scales that are to be thrown off—that they may not fly far. Fortunately, these inunctions are antipyretic and may be repeated with such frequency as the thermometer indicates, but should be used several times daily as a preventive. The hairy portions of the surface should in like manner have a daily bath in some liquid disinfectant, alcohol being reliable and having properties likely to make it popular with nurse and patient.

In this we are guided by knowledge; our beliefs will direct that the lard or other oily substance contain some disinfecting principle and fortunately nature has armed us with a large class of bodies, the essential oils, that are powerful germicides and therefore efficient disinfectants. These oils are reliable in varying proportions from 1 to 100 to 1 to 35,000. Oil of mustard having the higher proportion has great reputation as a disinfectant for the hands of the operating surgeon and should be efficient in quantities that would be free from its well-known effects as an irritant. Oil of eucalyptus is not so powerful a germicide, but is less likely to prove irritating and from long use I can advise it in strengths varying from 1 to 10 per cent., regard being had for the delicacy or density of the skin. The proper proportion may be added to a cup of melted lard, well stirred and allowed to cool, and you have a potent remedy representing knowledge and belief, the science and the art of medicine. I hold that it is easily within the power of the physician so to conduct his cases of scarlet fever and diphtheria that in these diseases the room shall never become infected; that the room may be entered at any time during the course of the disease by the physician or parent without danger of spreading the disease, and I am aware that during the state of desquamation of scarlet fever this theory is the most seriously tested. In order that the room may not become infected, care must be exercised in its selection and eternal vigilance in management during the illness. Fresh air and cleanliness are the words which point the directions for our efforts and you would say that these are simple matters easy of accomplishment.

To wipe the bare floor daily with a cloth moistened in a suitable disinfectant solution, and—1 to 1,000 of corrosive sublimate answers well for this purpose—should be the minimum of care throughout the entire course, but when the peeling is in process this should be done more frequently. To provide fresh air—in this as in all other infections the great and unequaled disinfectant—is at once your most important, easiest and hardest duty. Why it is important, or how it may be accomplished, we will not spend time to discuss, but will turn our attention to the difficulties. First in order and importance should be named, the lack of conviction on the part of the physician, likewise his persistent belief that great care must be exercised in keeping the patient warm in all cases of exanthemas, likewise his still greater solicitude that there must be no draft, or chance for cooling the surface in any disease having a tendency to kidney complication—the well-known danger from nephritis in scarlet fever is the bug-bear of the disease—and the resulting close and foul rooms, are, in my judgment, the chief causes of this complication.

Scarlet fever is a toxic disease—the toxin is in the blood and in every vascular tissue. Scarlatinal nephritis is a toxic inflammation, and it is prevented or minimised by antitoxic management, and there is no antitoxin like the antitoxin of pure air, regularly adminstered day and night, summer and winter, throughout the entire course of the disease. After this manner was I taught by my preceptor, a master of the art of medicine, the late Dr. Gorham F. Pratt, and have so practised for thirty-five years, and during this time have not in private or hospital practice had a fatal or alarming case of post-scarlatinal nephritis. In my judgment, emancipation from the prevailing fear of the malign effects of fresh air in scarlet fever is necessary before a physician can exhibit the intelligence of the art of preventive medicine, as related to this disease, and when that emancipation is fully come, the physician's troubles begin, for he then finds himself at war—a pioneer conscience on the one hand and professional and popular prejudice on the other.

The second order of obstacles to the suitable airing of the sick room in this disease is the ignorant and invincible prejudices of the friends of the patient. You may give your orders clearly and precisely, as good form always directs, and your orders may be received with a reasonable show of loyal obedience, but ten to one those orders will be fanatically disobeyed the moment you are out of sight. Infinite patience and perseverance is the only rule to success in this work. Can you bring chemistry to your aid to prevent the room from becoming infected? There can be no doubt of your ability so to do. Pastiles containing materials which heat diffuses throughout the room and still retain germicidal power and yet leaves the atmosphere respirable are found in all the shops. Frequent cleansing of all parts of floors and fixtures where dust might rest with a vigorous disinfectant is, of course, in order and presents no serious difficulties.

The thought that should guide us in this work is that the infection of scarlet fever is a particulate body that is thrown off in the peeling: that it should be sterilised while yet upon the body, or not allowed to fly beyond the sick bed.

Finally, as to the particular duty of the rural practitioner in these cases. This consideration takes us back to a previous position where we saw that the farm is the source of food supply to our less fortunate urban population; and we have simply to remember that recent observation amply demonstrates that milk is a most sensitive and perfect culture medium for the microbe of scarlet fever; that at the present time infected milk seems to be the chief source by which the disease is communicated. The coincidence of the outbreak of scarlet fever and the milk route of a single dealer has been shown over and over again and of itself proves the relation of the disease to the milk supply; this becomes a demonstration, as Dr. Wende has reported in many cases, when search of the milkman's premises reveals a case of desquamating scarlet fever in his family, and brings out the point of where the responsibility of the medical adviser in the case comes in.

The country doctor is sometimes regarded as an unimportant or humble member of the body politic, that he does not need to know very much, that a slight knowledge of medicine and a large ability to resist hunger, and loss of sleep, cold and heat, make up the essentials of his kit; but we have seen that the country doctor stands upon guard at a most important and exposed part of the camp, and that to guard the lower animals from tuberculosis, to protect the wells and streams from the bacillus typhosus, to preserve the milk supply from the infection of scarlet fever is a duty and a service to the public health of the highest magnitude; and it hardly needs to be said in view of the prejudices, the isolation, the lack of sympathy against which he is obliged to work that his professional kit needs to be well stored.

To conclude I cannot do better than repeat the noble words of your honored presiding officer, "salus populi suprema lex" and would add the simple thought, that to be permitted even in a humble way to work in the cause of preventing disease, of protecting the health and the lives of the ignorant and helpless, is worthy the ambition of the most ambitious; that in this work sanitary laws and health ordinances, both state and local, must be conceived with full knowledge, and enacted in practical wisdom, but even then will fail miserably unless supported by sane public opinion and enforced by a medical profession, every member of which is generously equipped for great responsibilities. An efficient and intelligent medical profession is at once the beginning and the end of the equipment for the protection of the public health, and high standards of qualifications and state examinations to test the aspirant by these high standards, are but intelligent means to important ends.

433 FRANKLIN STREET.

ANESTHESIA BY NITROUS OXIDE GAS AND ETHER.[1]

By PRESCOTT LE BRETON, M. D., Buffalo, N. Y.
Assistant Attending Surgeon to the Buffalo Hospital of the Sisters of Charity.

THE past two years have seen a marked change in the method of giving anesthetics in New York City, and now anesthesia by "gas and ether" is in common use in the large hospitals there. For over two years it has been employed steadily in Roosevelt for all cases, also for the past year in the New York, and for six months at the Presbyterian and St. Luke's Hospitals. At Bellevue, however, it has been given only in selected cases during the past year. Considering these facts it will be most interesting to inquire into the history of this method, the means of administration and its advantages and disadvantages.

Anesthesia by nitrous oxide gas and ether is not new. Clover, in England, in 1876, was the originator of the process and of the first form of apparatus, and it is in England that we find the majority of the defenders of this form of anesthesia. By 1896, it was in constant use in London at the larger hospitals. In 1896, Robert Weir, at the New York Hospital, gave gas and ether to about thirty-five cases, but discontinued the administration on account of the cyanosis produced by the gas. Later he resumed its use. In the latter part of 1897, Dr. Thomas L. Bennett came to New York City, and called the attention of the leading surgeons strongly to Clover's method. He was appointed anesthetist to the Hospital for Ruptured and Crippled.

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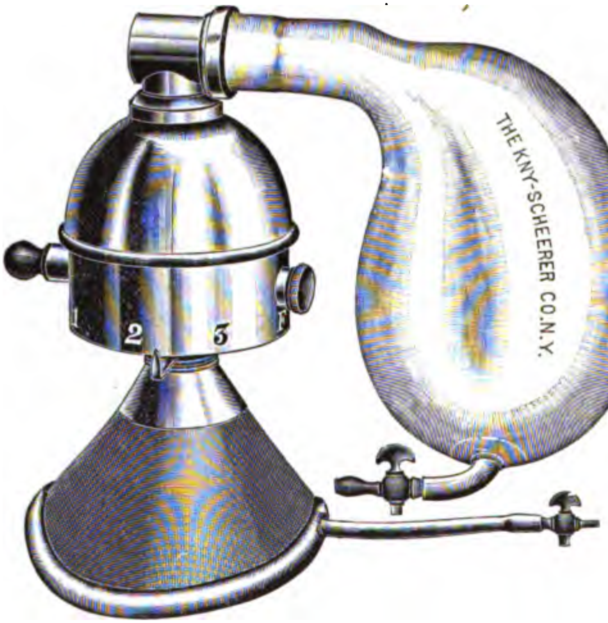
[1] Read before the Surgical Section, Buffalo Academy of Medicine, June 5, 1900.

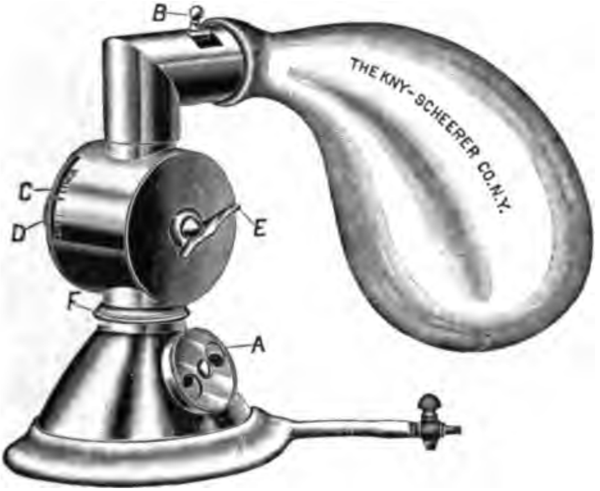


THE HEWITT INHALER.

McBurney became interested in Bennett's work, and during the first part of 1898, the writer, while house-surgeon, had the good fortune of seeing gas and ether given at Roosevelt, about 200 times. Recently Drs. Mann and Crockett have begun to anesthetise cases in this manner at the Buffalo General Hospital.

The chief object of this method of preceding the administration of ether by gas is the anesthetising of the patient quickly without the usual "stage of excitement," to pass to full anesthesia under ether inside of four minutes, often in two to three minutes. Nitrous oxide is nonirritating and nonstimulating, rapid in action, and gives the patient no sensation of impending suffocation. Chloral, alcohol, morphine and local applications to the upper air passages have their objectionable features when used to lessen the unpleasant effects at the start of etherisation. Likewise is it so when chloroform or the A. C. E. mixture is substituted. Nitrous oxide, however, is an improvement as a precedent to etherisation. Practically its only contraindication is an atheromatous condition of the arteries.

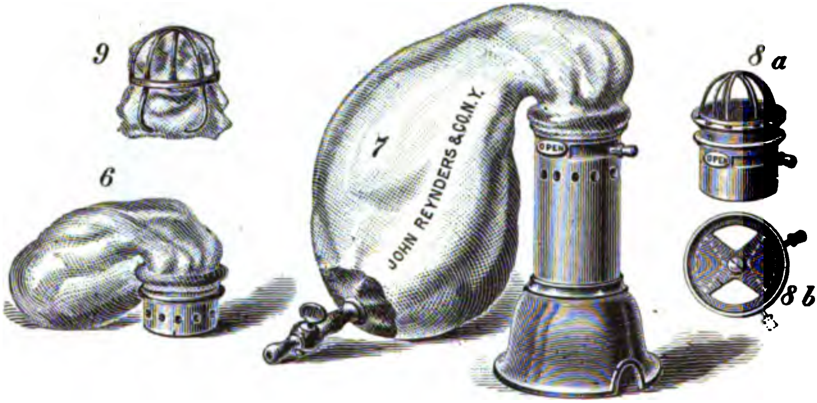
The favorite apparatus in New York City is the Bennett modification of the Hewitt inhaler, made by Kny-Scheerer ($40.00.) The Hewitt inhaler ($30.00) is more bulky. These forms permit the turning on of the ether while the gas is still being given. It is less expensive to have two inhalers, one, the usual gas inhaler found at the dental establishments and the other the Ormsby inhaler.



THE BENNETT INHALER.

The apparatus now used by Dr. Mann is recommended on account of its simplicity, cheapness and serviceability. It was devised by Dr. Goldan, and is made by Reynders ($13.00.) It differs from all others in that it dispenses with valves and yet allows ether to be given with the gas before the narcosis is complete. It consists of a face-piece of rubber and a metal cylinder, holding a piece of gauze for the ether. Into the end of the cylinder can readily be fitted the usual gas attachment. Later this gas attachment is removed and a rubber bag adjusted, which with the cylinder acts as an Ormsby inhaler.

Before administering the gas the same precautions are taken as before any etherisation. If the Hewitt inhaler is employed, after the intaking of six to ten breaths of pure gas, ether is gradually added and the gas as gradually turned off until ether alone is being inhaled. With the Goldan apparatus the following method is advisable. The rubber bag for the gas is emptied of air and filled with gas from the cylinder. The face piece is closely adjusted to the patient, who is told to breathe deeply and regularly. In about twenty seconds, when the sensation in the glottis is dulled the cylinder and gas attachment are disconnected, one drachm of ether is poured on the gauze in the cylinder and the gas attachment readjusted speedily. The patient now breathes gas and ether simultaneously. In a few seconds another drachm of ether is poured into the cylinder and later another drachm.



THE GOLDAN INHALER.

At the end of one minute or thereabouts, certain signs appear, a change in the rhythm of respiration, *i. e.*, from full deep regular breathing to rapid and somewhat jerky breathing, a slight cyanosis ensues and the patient can no longer voluntarily hold up his arms. The gas attachment is now withdrawn, the rubber bag is fitted to the cylinder and ether alone administered in drachm doses, occasionally repeated.

The disadvantage in using the ordinary dental gas inhaler and then changing to the Ormsby, which is an old plan, is that choking and coughing frequently follow, as there is no gradual transition from gas to ether, as allowed by either the Bennett or the Goldan apparatus, but a sudden and dense ether vapor is presented to the patient who has been breathing gas. The same signs are watched for, a change in the rhythm of the breathing and a slight cyanosis. Then at the end of an inspiration the dental inhaler is taken away and the Ormsby containing the ether is adjusted. The patient frequently coughs and sometimes it is necessary to allow one or more inspirations of pure air, or respiration stops and the cyanosis deepens. To avoid this mishap it is well to have the air-valve of the Ormsby open at first, that the ether vapor may be diluted. Patients differ as to the relative amount of air required while breathing into a "close" inhaler, but in general more air is needed the longer the patient is unconscious.

There are several practical points to be remembered and emphasised in the administration. First of all speed is essential in the transition from gas to ether, that no time is lost and that as little air as possible is given. The pulse may be disregarded throughout these first few moments. The face piece of the gas inhaler must be closely adjusted to exclude air. The commonest error is to continue the administration of the gas until muscular twitching, deep cyanosis, stoppage of respiration and dilatation of pupils occur. This stage must never be reached or consciousness will be resumed before the anesthetiser succeeds in establishing normal respiration.

The advantages are:

1. Comfort to the patient. All cases object strenuously to being anesthetised by ether alone after experience with this method.

2. Freedom from excess of mucus and saliva as the glands are not stimulated by the gas.

3. Less ether is required. Two ounces are ordinarily sufficient for a major operation.

4. Diminished chance of kidney complications, owing to the small amount of ether inhaled.

5. Cheapness. After the apparatus is paid for nitrous oxide gas and ether are less expensive than ether alone.

6. Alcoholics are anesthetised with less trouble by this method than any other according to some authorities.

7. The amount of time saved for the surgeon when several operations follow each other is a weighty consideration.

8. The mastering of this method is not difficult. A hospital interne can ordinarily learn how to administer gas and ether satisfactorily after two or three attempts.

9. Frederick Treves gives gas and ether to patients of all ages, male or female.

10. Safety. In the literature which the writer has seen there is the report of but one death. Anesthetists of large experience, as

Hewitt, Braine, Bailey, Bennett and Goldan agree as to the safety of this means of inducing narcosis.

The chief disadvantage is the cost and bulkiness of the apparatus. Some writers dislike the "close" inhaler, as the patient necessarily inspires again and again his own breath, including the carbon dioxide and particles of organic matter. It is questionable if this objection is not of theoretical rather than practical value.

BIBLIOGRAPHY.

1. Hewitt, Braine, Bailey and Treves. *The Practitioner*, October, 1896.
2. Bennett. *Medical Record*, Vol. LIII., No. 9, p. 296.
3. Gibney and Weir *Medical Record*, Vol LIII., No. 13, p. 457.
4. Goldan. *Journal of the American Medical Association*, March 24, 1900.
5. *Indiana Medical Journal*, May 10, 1900, p. 451.
6. Goldan. *Medical Record*, April 14, 1900.

525 DELAWARE AVENUE.

GONORRHEAL RHEUMATISM.[1]

BY J. HENRY DOWD, M. D., Buffalo, N. Y.

I USE the term gonorrheal rheumatism for no better name has as yet been found to characterise this complication of specific urethritis. It is an affection involving not only the joints but the theca of tendons, muscles and nerves, also the synovial bursæ, although the three latter varieties are rare. There seems to be no doubt that this affection is due to the absorption of gonococci, or their toxins from an abraded urethra. It is now conceded that the former are always present, this being demonstrated by cultures. Absorption from the vulva, vagina, cervix and endometrium has also been proven, but few cases are reported. The toughness of the epithelium of these parts, together with the fact that these structures are the ones generally involved in gonorrhea of the female, goes a long way in explaining why the latter class rarely have this complication. It is only in the subacute stage that we find this complication arising. This is accounted for by the swelling of the mucous membrane during the acute stage and also that it is the continued severe inflammatory action in the canal that causes the epithelium to become abraded, thus facilitating absorption.

In the five cases occurring in my own practice the earliest sign of involvement was seventeen days after the onset of the acute urethritis. The too early use of instruments is also an important factor in causing solution of continuity of the epithelium and even the mucous membrane. I am almost positive that in my last case, thecitis was due to the use of sounds, the physician mistaking the trouble in the canal.

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[1] Read before the Surgical Section of the Buffalo Academy of Medicine, June 5, 1900.

A certain class of individuals seems more prone to this complication than others. Thus we find that a father, mother or grandparents had gout, rheumatism, and the like. Of 376 cases tabulated the joints involved were as follows: knee, 136 times; tibiotarsal, 59 times; wrist, 43 times; fingers, 35 times; elbow, 25 times. In my own cases: knee, 1; elbow, 1; wrist, 1; metatarsus, 1; thecitis, 1. It is thus seen that the knee is the favorite joint. Pain and swelling of this joint during a subacute gonorrhea must be looked at with suspicion.

SYMPTOMS.

It will be unnecessary for me to go deeply into detail regarding the symptomatology of this affection, but rather a few brief and emphasised points should place this complication so in your mind that a mistake in its diagnosis would be practically impossible.

The joint involvement may be divided into two classes, viz.: monoarticular and polyarticular. The first, which is most frequent is ushered in by headache, general pains in the back, legs and several joints. These soon disappear, excepting in one joint, usually the knee, which becomes swollen, red and very tender, assuming a semiflexed position. If the limb is put at rest at once, so as to avoid irritation, the acute symptoms subside very shortly, but the exudation and swelling remain.

In favorable cases where rest and careful attention is given to the urethra, absorption of the exudate may take place in the course of six or seven weeks and a healthy joint remain. As long as there is any infiltration, forcible movement of the joint, as also irritation of the urethra will tend toward continuing the trouble or may cause an acute exacerbation. Although this will also disappear repeated occurrences of the same tend toward chronicity, which is liable to pass into hydrarthrosis.

Should suppuration occur this will manifest itself, by chills, increased fever, swelling, with pronounced tenderness and other symptoms indicating pus. At times the surrounding tissues become inflamed, edematous and tender and the capsule ruptures, the pus burrowing between the muscles and tendons. If recovery occurs it is accompanied by ankylosis, but this is the condition that is very liable to result in pyemia and death.

Polyarticular.—This may be easily mistaken for acute articular rheumatism, still differential symptoms are present which should at once clear any doubt in one's mind. The number of joints involved are less than in rheumatism; fever is not as high and the severa joints are attached simultaneously instead of in rotation or by metastasis, as in the former. Lastly, where the former (rheumatism) will respond to antirheumatics, the latter will not be effected in the least. As with monoarticular, this class can also become chronic, making the patient an almost helpless invalid for life.

Hydrarthrosis.—This, as already stated, is the result, as a general thing, of frequent relapses of an acute condition which to all appearances may have apparently subsided. The knee is the only joint so far observed in which this complication has been noted. There is no fever, ill health or inflammatory manifestations of the skin covering the joint, which is much increased in circumference and somewhat painful. The fluid, which is a pale yellowish-green, may be absorbed very rapidly, or the reverse may be true, and the case continued for months, resulting in plastic changes with deformities. Pathologically, König's classification is a good one to go by. He describes this infection under the head of hydrops, serofibrinous, empyemic and phlegmonous.

It is in accompanying joint troubles that we generally find the eye involved, not as a conjunctivitis, but an inflammation of the membrane of Descemet. It is usually accompanied by pain and should the iris become involved there are symptoms referable to this condition. Involvement of the theca, muscles, tendons and nerves seem to be very rare, but from personal contact with a case of the former some time ago, I am led to think that this is a complication which might be present and easily mistaken for something else. At times it is accompanied by pain most excruciating, where at others this phenomena is not of much consequence. There is one peculiarity noticed, and the same may be said of myositis—namely, the femoral region is the part suffering from the attack. In my case but one group of muscles (flexors) seemed to be involved and when at rest there was no pain, but on attempting to move it was very marked. This localisation in one group of muscles is explainable by the fact of the close relation of the sheaths with possible communication, at or near their origin or insertion.

Lydston reports a case of involvement of both sciatica nerves accompanying a gonorrheal affection,this subsiding as resolution took place, only to return at a second infection. If deep pressure is made over the affected area, pain is usually much marked.

Myositis—Muscular involvement is also a rare complication which seems to have a special affinity for the femoral region; in fact, Professor Eichhorst, of Zurich, says "in every case so far observed it was the femoral region that was invaded." He also states that this condition is due to the gonococci and not the staphylococci. There is a distinct swelling of the part which is hard and slightly painful. Although the severer symptoms gradually disappear, a hardness remains for some time. Fever may or may not be present and the skin usually remains in a normal condition.

A guarded prognosis must be given in all joint troubles complicating gonorrhea. Good results may be looked for where appropriate treatment is commenced early, but no man can foretell what joint may become ankylosed or even destroyed, necessitating the loss of a limb.

TREATMENT.

Before speaking of this in detail it may not be amiss to call attention to the facts that (1) we are dealing with an infection caused by the absorption of cocci or their toxins, the latter being in reach of destructive agents; (2) here, as in all other inflammations, our first and only rule must be rest to the part involved.

When a diagnosis is positively established the joint or joints must be rendered immobile at once. The smaller ones, where very little swelling can take place, undoubtedly the best mode of fixation will be plaster-of-Paris bandage. In the knee, for instance, it is advisable to fix by posterior splint and roller bandage, the latter being applied so that the joint is exposed where during the acute condition an ice bag must be kept constantly applied.

Immobility being assured attention should be directed to the urethra for the destruction of the offending agent.

This resolves itself into the cure of the inflammation with the least possible irritation. The time at which the complication develops plays the most important part in the mode of treatment that should be pursued. If seen early, *i.e.*, within three or four weeks of the acute urethral infection, by all odds medication by the patient himself is the ideal treatment. On the other hand, if four weeks or more has elapsed, local treatment by the attendant is the only hope of a successful termination of the urethral involvement. It will be impossible to dilate upon this subject further than to say, daily injections of silver nitrate should be used, commencing with a strength of 1-12,000 in distilled water. The solution must be increased daily until a strength of 1-1000 is reached, if necessary, and these used without aid of any instrument in the canal[1].

While the urethra is under treatment, the patient should be carefully watched as to temperature, general condition and state of joint or joints involved. It is rare to find the smaller joints markedly enlarged from effusion, but the knee is often the reverse, the pressure causing much pain. When bulging is marked, under strict antiseptic precautions, puncture with evacuation of the fluid and flushing of the cavity with sterilised water yields the most happy results. This should be carried out in every case where the symptoms are at all severe. Should pus be found, an antiseptic solution (never bichloride) as Thiersch's should be substituted. In case of suppuration continuing and rupture of the capsule with disorganisation of the joint threatened, opening of the same and drainage is absolutely necessary. Ankylosis being prone to follow this condition, it is advisable to have the limb placed in the best possible position, so that the patient may not be too greatly handicapped in after life. When destruction of the articular surfaces has progressed to a degree where the joint is entirely destroyed, resection with resulting partial, if not complete, ankylosis must be accepted. Although hydrarthrosis is rarely followed by serious results, treatment is often prolonged before complete recovery ensues, and at times this is unattainable. If the case is seen early blisters by cantharis or iodine, pressure by the rubber bandage and rest gives the best results. Even these may fail to bring about absorption of the fluid and puncture may be necessary.

When this is practised the most careful antiseptic precautions are all important,and as soon as the joint is emptied the puncture opening should be sealed and pressure and rest enforced. This may fail,the joint refilling and soon attain the previous size. In this condition and after repeated trials have been given the afore mentioned, the joint may be emptied and after thorough washing, to remove all débris, a 5 per cent. solution of carbolic acid can be injected, which should be carefully distributed by manipulation of the fingers externally. The joint must again be fixed, pressure applied and rest insisted upon. Pain can be relieved by morphine or heroine, but great care should be used to prevent the patient from becoming a constant user of these drugs. The general condition of the patient often needs attention, but tonics are the only drugs from which any results may be hoped for.

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[1] Dowd: Buffalo Med. Jour., August, 1897; Medical Record, September, 1897; British Med. Jour., London, Eng., October, 1897; Review of Reviews, November, 1897; American Jour. Dermatology and Genito-Urinary Diseases, October, 1897.

CASE I.—Gonorrhea, first attack. No instrumentation of the urethra. About three weeks after, noticed right knee swelling; very painful. Ordered to bed with splint and ice bag. During the next six weeks, the temperature ranged from 99½° to 101°, the joint continuing to swell, causing much suffering. On the tenth day after involvement, with the assistance of Dr. J. F. Myer, I opened the joint, removing over a pint of fluid. About the eighth week the pain having entirely disappeared, massage, with passive motions was commenced. At the end of about three months, motion perfectly normal, and the swelling and the thickening had entirely disappeared. About the fifth or sixth week, the parents of the young man, asked for consultation. A surgeon of the city was called who advised amputation.

CASE II.—Consultation—A.G., aged 28; single; about four weeks ago contracted gonorrhea. One week ago noticed swelling of the left wrist, accompanied by severe pain and warmth of the body (fever). At my visit the following condition was found: wrist much enlarged, flexed and very painful to the touch or on attempting movement. Temperature, 100°F.; profuse uretheral discharge and urine passed into two glasses, showed marked opacity of both. Treatment had consisted of balsam copabia and an injection. The wrist was upon a pillow and flax seed poultices were being constantly applied. The joint was put upon a splint for a couple of days and a solution applied to, if possible, reduce some of the swelling before applying the plaster.

On April 22d, the joint was firmly fixed with plaster and treatment begun for the cure of the urethral trouble. Within five or six days thereafter the temperature became normal and the pain had almost entirely disappeared, except when the fingers were moved.

Daily irrigation of the urethra with silver solutions was carried out and on the seventeenth day the pain having entirely subsided the plaster was removed and a roller bandage applied. During the following two weeks passive motion, following massage, with oleate of mercury ointment was practised, at the end of which time there was normal motion, no swelling, no urethral discharge and both glasses of urine was perfectly clean. In this case I failed to ask if any instruments had been used during the acute condition, but the patient told me very strong injections were given him. The time occupied for complete resolution in the joint was about four weeks. There was no rheumatic history in this family.

CASE III.—Applied for treatment one week after commencement of an acute attack of gonorrhea. A physician was consulted, on appearance of discharge, who said there was a chancre in the urethra, and passed a sound. This was repeated twice during the week. Prescribed appropriate treatment and the patient left for New York, returning in about a week. At this time the discharge had materially decreased and the urine was becoming clear. During the next week he indulged freely in beer and on his visit, presented the following conditions: severe pain in the back, extending down the femoral region of the left side as far as the knee; right knee one-half inch larger than the left, red and quite painful. The condition was explained to the patient and the knee painted with iodine and a tight bandage applied, with instructions to remain quiet and continue medicines. Four days later the knee had assumed a normal condition and the pain was absent, but the flexors of the left femoral region were painfully involved to such an extent that walking was almost impossible. This continued for about ten days, when the pain moved to the popliteal space, at the same time involving an area directly over the sartorius muscle. Rest was enforced as much as possible and in the course of a couple of weeks the pain had entirely disappeared, also the discharge, the urine becoming practically clean, except a few small shreds which persisted. In about a month the canal was examined and two strictures, number 20 F, were discovered about two inches back from the meatus. These were dilated. There is no doubt that the use of a sound was the cause of the rheumatic condition, and also the strictures were of traumatic origin.

288 Franklin Street.

THE ABUSE OF QUININE.

By W. F. CHURCH, M. D., Chicago, Ill.

THE history of therapeutics is full of illustrations, showing that every drug found valuable in a single condition has been tested repeatedly in almost every ailment known to man. This is due, in a measure, to the desire and search for specifics, but largely to the exaggerated notions commonly attached to a favorite remedy. Such has been the history especially of cinchona, or its chief alkaloid quinine. Originally used and introduced into Europe for malaria, its great efficacy in that disease naturally resulted in its extended trial and use for all symptoms and diseases. The difficulty in obtaining the drug and its high cost no doubt added to the estimate of its virtues and helped to create a great demand.

Medicine, like law, though not to the same extent, has respect for precedent and a drug may be used repeatedly without efficacious results and still its use be continued for no other reason than that it was recommended by someone in the past and that recommendation passed from text-book to text-book. Some of our latest authors on pharmacology do not base their work chiefly on original investigation, but compile their material from authors past and present. It need not, then, be a matter of wonder that all the advances in the art of therapeutics have failed to relegate quinine to its specific indications. It comes nearer being used as the universal remedy than any other.

There is no question but that the less the laity know and hear about morphine, acetanalid, sulphonal and kindred drugs, the better for them and the better for the profession. There are certainly excellent reasons for a common knowledge of the use of quinine in malarial infection that does not apply to other remedies for other conditions. Its value to settlers in a new country or travelers and explorers far from medical aid is hardly apt to be over estimated. But a chill is a chill to most people, whether it be from the plasmodium of Laveran, from an infection by pneumococci, or from whatever cause, and quinine is called into requisition, especially if they are living in what has been a malarial district. Thus, often valuable time is lost before a medical adviser is summoned.

That quinine is used so largely and universally is due chiefly to physicians themselves. If a learned doctor, in good repute, enthusiastically declares he broke up the grippe in his own case in twenty-four hours by two doses of quinine of 20 or 30 grains each taken in *spiritus fermenti*, is it any wonder his admirers, having such an example, attempt to accomplish a similar result with the same agents? Naturally it follows that quinine is often taken for influenza that is not influenza.

What difference does it make to the profession whether the laity take quinine or drench their internal organs with patent medicine? Very little probably if the ailment is slight, but a physician will hardly raise his standing with a patient who has been taking quinine without gratifying results if he finds it necessary to continue the drug. Not infrequently such a patient draws the conclusion that had he continued the use of the remedy his health would have been speedily restored; that under the circumstances the doctor did not deserve much credit and really displayed but little more skill than himself. A few may feel flattered because they are on the right track and think the doctor a good fellow in being able to recognise their wisdom. On the other hand, there are many willing to take quinine only when prescribed by themselves. A doctor should be sufficiently well versed in medical lore to effect a cure by other agents. The dictum that went forth from some great teacher in the past, "when you don't know what to give, give quinine," should not apply to this period. It should be inscribed only in the history of the time when men wrought in the morning twilight of our present science and fought disease with quinine as their greatest therapeutic weapon. Whoever goes forth now to fight the countless host of microörganisms, intending when in doubt to give the one remedy, cannot expect to become a good therapeutist or an expert diagnostician. A remedy, good in every case, can only beget carelessness in diagnosis.

Does the physiological and therapeutic action of quinine warrant its being repeatedly prescribed in every diseased condition from "ague to zoster?" The knowledge of the action of a drug so old and so widely used ought to be exact. However, works on therapeutics are not unanimous in their statements regarding its action on the blood, the most important of all. There is no doubt that it acts as an efficient poison to the malarial plasmodium, but it is highly important that we should have an exact knowledge of its action on the corpuscles in other infections or in anemia. Are the red corpuscles increased or decreased? Is their oxygen-carrying power increased or diminished? Is there any change in the number of white cells? Hare says: "Quinine, in medicinal amounts, increases the number of red-blood corpuscles very materially." Foster's Therapeutics states that "the red cells are slightly diminished in number, (a statement directly opposite to the first authority), the coagulability of the blood is diminished and emigration of cells embarrassed; also there is diminution of oxygen-carrying properties." Some experimenters and authors, among them Potter, declare that leucocytosis follows its use while others maintain that the white cells are diminished in number.

In order to reach a correct conclusion from these contradictory statements, it will be necessary to decide from the weight of testimony, giving due consideration to careful investigation. From the dozen authors consulted, I shall only take space to give the views of two of the latest, who present, according to my judgment, the most reliable results. These do not materially differ from those given by Foster, but are more positive:

Cushny (1899) says:

> The number of leucocytes in the blood is much diminished by the administration of quinine in man and the lower animals, but it is unknown how this is effected. The statement that the normal spleen undergoes a contraction in size and partial atrophy after quinine, while not improbable in itself, is not supported by experiments in which accurate methods were used. The change in the circulation in mammals are caused by a preliminary contraction of the arterioles and acceleration of the heart, followed by dilatation of the former and slowing and weakening of the latter.

Schleif and Gallaudet (1899) give a brief summary as follows:

> Ameboid activity of the white corpuscles is decidedly lessened and their number is diminished; the red corpuscles are decreased in size and the power of their hemoglobin to carry oxygen and ozone is impaired.

From this evidence the deduction is legitimately made that quinine is not the proper remedy when leucocytosis is desired

According to Nancrede (*Prin. of Surg.*, 1899):

The sole exciting causes of inflammation are pathogenic organisms or their products. Pus consists of pus cells, *i.e.*, dead and dying leucocytes and germinal cells, which have perished in their attack upon the germs or been killed by the germ products.

Knowing, then, the action of the white cells on microörganisms, it seems that the proper mode of treatment in some types of inflammation would be to increase the number of leucocytes, if they were being overcome.

The authority quoted above (Schleif and Gallaudet) further says:

In conditions of septic intoxication, pyemia and puerperal fever and anemia, it has been much in vogue, but evidence of its utility is wanting.

The tonic properties rest largely on the belief in the increase of the red corpuscles, but here there is a difference of opinion and the negative side seems to have the greatest weight of authority. This side also maintains that the oxygen-carrying power is diminished. It may be that the tonic effects are accomplished in some cases by its ability to increase the appetite, but many stomachs revolt at its use and there are undoubtedly superior stomachics. Increased action of the heart in ordinary cases is probably also an important factor, though temporary. As an antipyretic, with the single exception before mentioned, quinine now occupies an inferior position though Jacobi claims it tends to prevent the destruction of cells, and is consequently valuable. It is thought by others that a lessened amount of nitrogenous tissue is destroyed. In select cases of impaired matabolism, when the nitrogenous waste is excessive, it would be of value. An opposite condition might be a contraindication. However valuable quinine may be in aborting coryza if used early, as claimed by some, it can but aggravate the unpleasant feeling of fulness when symptoms are fully developed. As a local application its use would certainly be preferable to internal administration.

To afford a proper basis for comparison it may be well to state here the legitimate uses, as given in one of the latest books (Cushny). Quinine is there recommended in malaria, in some cases of leucemia enlargement, in febrile conditions (though inferior except when temperature is falling) and in various forms of neuralgia and headache, especially when periodic in appearance. How many practitioners limit the use of quinine to the legitimate indications? If it is necessary to give a placebo, why not give something that is a genuine placebo and not a drug capable of producing in some instances unpleasant or even harmful results? Occasionally a patient is peculiarly susceptible. Foster's Therapeutics states: "The toxic dose is difficult to estimate. Forty-four grains in divided doses in fifty hours, in one instance, produced death and twelve grains are recorded as having caused amaurosis." It is well-known that large doses may cause complete blindness or deafness, which, as a rule, gradually disappears, but may in rare instances remain permanent.

A few years since a physician in Toledo lost prestige in a family, and, of course, among the circle of friends, by producing amaurosis with large doses of quinine. A case of quinine blindness was recently reported by Dr. Moulton in the *Western Clinical Recorder*, in a child of three years. In the course of five days 90 grains were administered. On the sixth day the child was blind. After the discovery 20 grains more were given in the course of two days. The treatment consisted of Fowler's solution and strychnine. The child could see a little twelve weeks after the accident, and in six weeks more could pick up small objects, "as pencils and even pins from the floor." In Moulton's opinion the accident of quinine blindness is not so rare as generally supposed, especially partial and transient impairment of vision. Susceptibility may be manifested in other ways. My attention was recently called to the case of a child in whom quinine always produced an erythema, in one instance, accompanied by grave symptoms.

At a recent meeting of the Pittsburg Medical Society (*Phil. Med. Jour.*):

> Dr. J. D. Heard reported a case of extreme susceptibility in a young girl. One-eighth of a grain sufficed to cause an acute universal erythema with desquamation and headache. Dr. F. F. Simpson reported two similar cases, one suffering general desquamation, including nails, the other going into collapse and recovering under stimulation. Dr. P. J. Eaton reported a case in which quinine produced intense prolonged headache and insomnia. It is fair to presume that similar results are produced more frequently than is supposed as the cases may not be recognised, or if so, not reported. If other medical societies could report a proportional number of cases, and there is no reason to think that Pittsburg has a monopoly in this line, the list might open the eyes of the firm believer in quinine's harmlessness. There are excellent reasons to suppose that few of the unpleasant results are reported, especially in the country and smaller cities. Cases might be recognised by opponents and the opportunity taken to discredit the physician reporting.

On page 319 of the *Canadian Journal of Medicine and Surgery*, Dr. A. J. Harrington says:

> The craze for ingesting quinine in every possible disease has caused an enormous amount of nervous disorder among business men, who keep the drug in their pockets just as they do car tickets.
>
> Many of the most serious cases which come under my notice are due to this drug. I feel safe in asserting that quinine causes more trouble to the community than morphine, although we do not hear so much about it. Drinkers and topers of opium and cocaine are spotted by most of their acquaintances, but the nerve tremor due to the salts of cinchona are put down to overwork, etc. Even medical men are frequently deceived by the symptoms, for I have had many cases sent to me where the cause was never suspected by the family doctor.

Koch, Bastianelli and other close observers, claims that hemoglobinuria may be produced in some cases when given for malaria and also when used for prophylaxis. Giving quinine for conditions carelessly diagnosticated as malaria, but in reality not, is without doubt its greatest abuse. Osler recently said: "Malaria is such an accommodating word. It covers such a multitude of diagnostic sins. It was at least as consoling in its way as the unctious word, Mesopotamia, to the old woman in the story." He who does not believe that every diseased condition, not easily diagnosticated, should be called malaria and has practised where some physicians had that habit and treated accordingly, will appreciate his arraignment of the distorted application of the term. During the first years of my practice, it was hard to understand why it was impossible for me to discover malaria when so many cases were reported by others. Light finally dawned. Malaria was the much abused term for uncertainty in diagnosis. Dr. O'Brien, of New York, recently in a medical meeting called attention to the frequency with which patients were given quinine for a supposed malaria when the tonsils were the real seat of the infection. The plasmodium has received too much credit for effects wrought by the typhoid bacillus. Altogether too frequently for the welfare of the patient have the chills and fever of pus formation been mistaken for intermittent fever and treated accordingly. A proper use of the microscope in diagnosis will give a more positive knowledge to the physician, serve to increase his prestige and assure the patient the benefit of the proper drugs.

Quinine is contraindicated in inflammation of the middle-ear and labyrinth, in renal irritation, and in acute inflammation of the gastro-intestinal tract. Without inflammation, in some instances, it is not well borne and may produce a heaviness, depression, or even vomiting, and more or less irritation of the digestive canal. Not a small number of individuals have learned of these unpleasant effects by dosing themselves and beseech their medical attendant not to give them quinine. Although quinine is not used now by physicians to the same extent as formerly, undoubtedly the amount is much too large. An agent for a physicians' supply house told me recently that his sales averaged about twenty-five ounces a day and he generally called on five or six physicians. His visits were two months apart.

According to official reports the people of the United States consume one-third of the quinine used in the world. In 1898, 1,539,056,750 grains were imported, or 20 grains to every man, woman and child. The excess used is certainly an abuse of an excellent drug and for the reasons above enumerated. Learned professors are partly responsible, as they advise it so frequently that students learn to recommend it "on general principles" in almost every case. Routinists, even after years of practice, are not excusable on the ground that what was good enough for the parents will do for the children. Fortunately the torch of science does not light the way for those deep in the rut and contented therein, but only for those who toiling on, lay aside habit and prejudice and accept the truth.

1125 W. North Avenue.

THE GREAT DANGER ATTENDING THE USE OF LONG-TUBE NURSING BOTTLES.

(Illustrated.)

By ERNEST WENDE, M. D., Buffalo, N. Y.,
Health Commissioner.

As MILK is an almost universal food for bacteria, its reception in a rubber tube, acquired from a coagulum that is normally cavernous and unstable, invariably presenting surfaces that are rugose and unpolished, rendering asepsis an impossibility, must necessarily augment the conditions favorable for the growth and development of microörganisms, and finally convert it into a nursery which produces conditions favorable to cholera infantum.

The microscopic examinations of transverse sections, cut from unemployed rubber tubes, taken from nursing-bottles procured at the various drug stores of Buffalo, revealed the fact that they were manufactured out of rubber sheeting cemented together at their longitudinal margins to complete the tubes, and the seams thus formed

These sections of rubber tubing show the internal surfaces with its mechanical imperfections; peculiarly adapted to resist cleansing, permit decomposition and growth of germs, the formation of toxic matter to contaminate and poison milk as it flows through them.

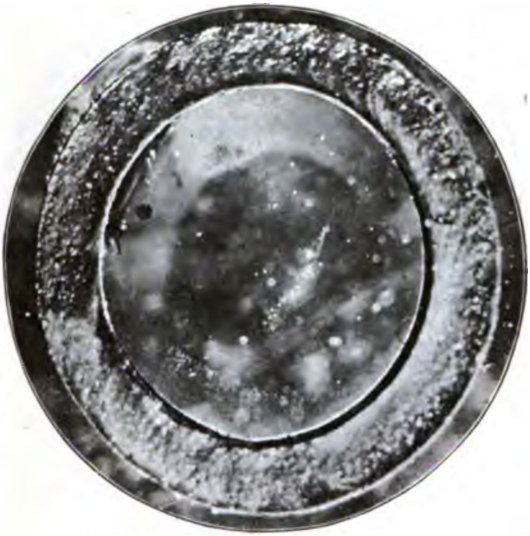

Fig. 1. Photo-micrograph showing the entire circumference of the tube enlarged, its irregular inner surface, and its general porous condition.

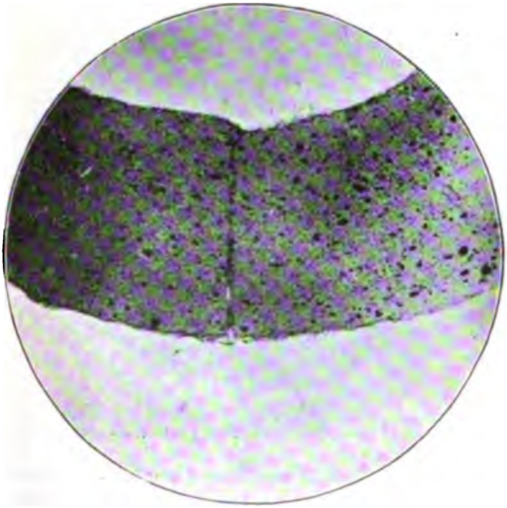

Fig. 2. Photo-micrograph showing tube to consist of a single sheet of rubber, its extreme porosity and imperfect seam.

were found unfailingly imperfect in their construction, showing, throughout their entire length, elongated pits and sinuses, which, in their functions, can only be likened to our modern bacteriologic "breed ovens." In some instances, this state of affairs was further intensified in that the tubes were constructed of more than one layer,

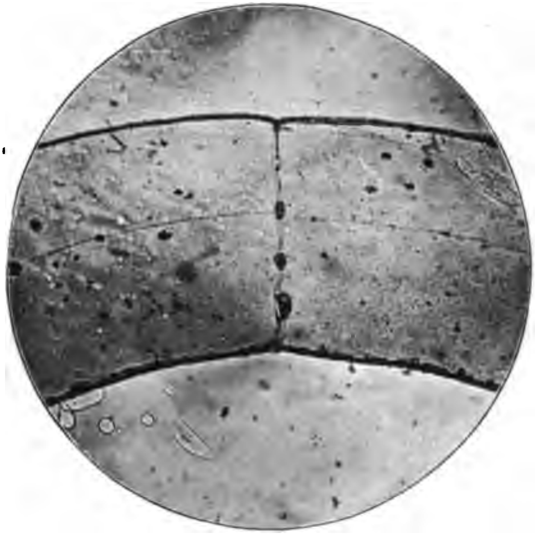

Fig. 3. Photo-micrograph.—Segment showing tubing to be made of two sheets of rubber; its porosity and joint with air cavities.

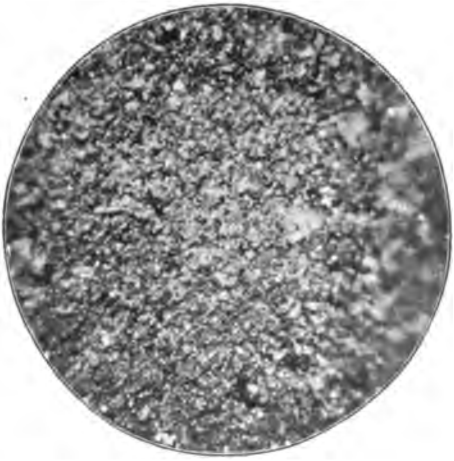

Fig. 4. Photo-micrograph showing irregularities of inner surface of tubing in the form of roughened and scraggy elevations and depressions.

between which such enormous spaces were frequently developed, directly connected with the lumen of the tube by the numerous pits

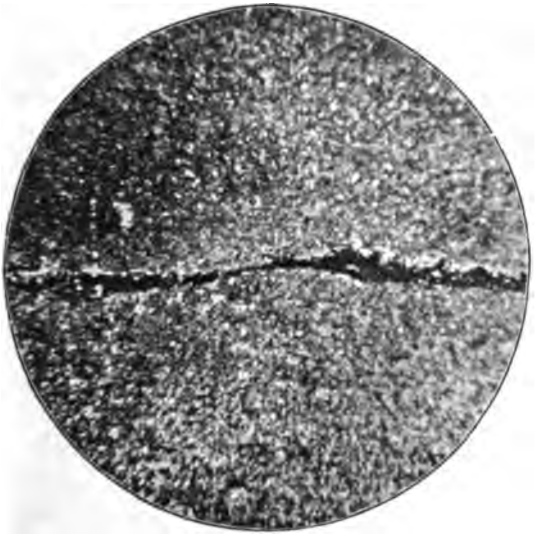

Fig. 5. Photo-micrograph showing inner surface of tubing to be extremely irregular, having countless elevations and depressions, also imperfect joint.

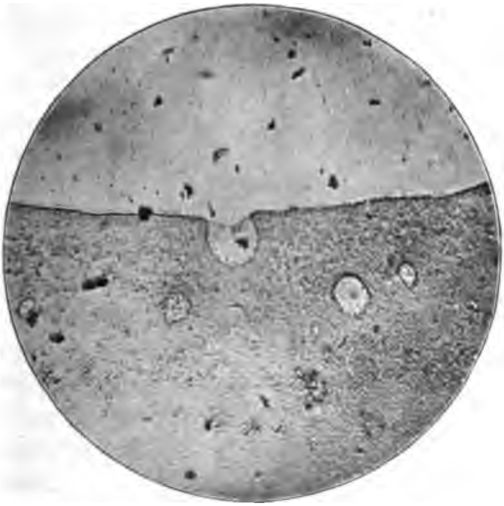

Fig. 6. Photo-micrograph showing the porous condition of the rubber; large air cells and pocket on the inner surface.

and sinuses referred to, as to more or less involve their entire circumference. Moreover, the sections likewise demonstrate that the material used in the manufacture of this tubing is exceedingly porous, and that the pores vary amazingly in size and shape. Again, pockets were often seen communicating with the inner surface of the tube, while, in several specimens, distinct channels were visible connecting similar pits or pockets with cavities in the substance of the rubber. It would, indeed, be difficult to imagine a more efficient arrangement for the propagation of germs.

By reflected light, under the microscope, the inner surfaces exhibit a view apparently made up of roughened and scraggy elevations and depressions with many openings and clefts, extending deeply into the texture. All the features of the imperfect seams, by this means, are easily discernible and can be readily traced and studied throughout their entire length. Therefore, it is obvious that any foreign material, gaining entrance to this perilous combination of pits, sinuses and porosites, cannot be removed by any of the ordinary methods of cleansing, however vigilant and faithful be the mother or nurse. Yes, it is extremely doubtful whether bacteria, when once lodged in these incubators, can be displaced or even destroyed by any known germicide or chemical.

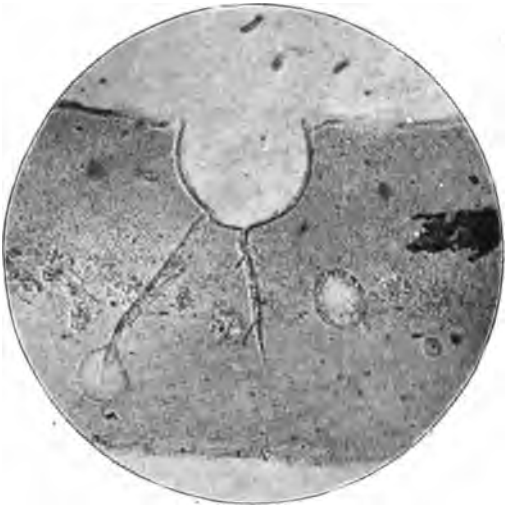

Fig. 7. Photo-micrograph showing a large pocket, on inner surface of tubing, communicating with a large air cell in its interior.

From the bacteriologic examination of an infected rubber tubing, we were able to recognise a deposit of decomposing material coating the inner surface, being the thickest in those portions of the lumen in close proximity to the nipple and glass tubing. This débris was found, on further investigation, to consist of coagulated casein, with innumerable bacteria of varied morphology. The qualitative bacterial examination of the material demonstrated the bacillus acidi lactici to be the predominating organism. The staphylococcus pyogenes aureus and ouidium albicans, with three other distinct species, two of which belonged to the nonchromogenic bacilli, the third being a chromogenic micrococcus, were present, and in addition to several species not yet completely isolated.

Five decigrams of this grumous conglomeration, dissolved in 2 c.c. of sterile water and injected intraperitoneally into each of three full-grown guinea-pigs, weighing respectively 200, 254 and 261 grams, produced death of the animals in from forty-eight to sixty-one hours.

471 DELEWARE AVENUE.

Progress in Medical Science.

OPHTHALMOLOGY.

CONDUCTED BY ALVIN A. HUBBELL, M. D., Buffalo, N. Y.

SPONTANEOUS ABSORPTION OF SENILE CATARACT IN THE INTACT CAPSULE.

DR. A. VON REUSS, of Vienna, (*Centralblatt für practische Augenheilkunde*, February, 1900; *Ophthalmic Review*, June, 1900,) finds that our knowledge of the conditions under which it is possible for spontaneous absorption of the cataractous lens to take place—a very rare occurrence, of course—is still meagre, and yet it is to a high degree desirable that we should know better for until we do so, we cannot tell whether it is possible that any attempt to deal with cataract without removal of the lens can ever be doomed to any result other than failure. Up to the present time some thirty or so of cases have been put on record. Reuss first of all describes two cases which he has himself seen, of which the first was published in 1885, but seems to have escaped the notice of all other writers on this topic. It is that of a man, E. L., whose right lens was extracted for cataract in 1868, obtaining vision = 20/20. In 1874, when he was sixty years of age, he suffered from an acute iritis, and was then observed to have a hypermature cataract in the left eye, but in 1876 the cataract had disappeared, except for a small sharply defined nucleus about 3mm. in diameter, lying at the level of the lower edge of the pupil. Above the pupil was quite black; vision = 20/50, and Jaeger 4, with +5 and +10d. respectively. In the operated eye there were a few vitreous opacities, and a small patch of choroiditis at the macula.

The more recent case was that of a man aged 75, whose left eye had undergone extraction for cataract in 1884; good sight had been obtained, but it had ultimately failed. The following year he had an attack of glaucoma in the right eye, which had yielded to poultices. He had a similar illness in 1898. About four months before Reuss wrote he began to find the vision in the right (unoperated) eye improving, and from p.l. it rose to 6/9 with +12, and J.3 with +16d. The a.c. was deep, the iris tremulous, the pupil black, there was distinct cupping of the disc, tension was normal, and the field of vision intact; close to the lower margin of the pupil a very fine transparent membrane could be faintly seen with a few white spots on it, but nothing one would call transparent capsule. Below this a small dark body could be seen, which was probably the shrunken nucleus. Although the patient admitted that on one occasion he had fallen and struck the back of his head, there was no real ground for supposing that the capsule had been ruptured; it appeared to be a genuine case of absorption within the intact capsule.

It used formerly to be believed that this was quite impossible, and Szili, who recorded one of the very early cases, felt himself called upon to suggest that as in his case the lens had swollen up very rapidly, the capsule might perhaps have ruptured spontaneously. It appears, too, that in a number of such cases the suspensory ligament gives way, and the shrivelled lens sinks downward; in the more recent of the two cases above recorded this had probably occurred. It is possible indeed that spontaneous luxation might precede absorption, but the comparatively healthy condition of the fundus and the possession of almost normal vision are distinctly in favor of any such assumption. In a certain number of the cases recorded by other writers also, it is to be observed that inflammation of one or another part of the uveal tract preceded the absorption, but what influence, if any, this can have upon such a result is not quite clear.

DIONIN IN DISEASES OF THE EYE.

DIONIN has been recently brought forward as an excellent general anodyne and hypnotic, whose use is not followed by unpleasant effects; and several observers have also found it beneficial in certain diseases of the eye. It is a compound known as the hydrochlorid of the mono-ethyl-ester of morphin (Gould's Year-book, 1900), and appears as a fine, white, crystalline powder, which is freely soluble in water. It is given internally in doses of one-fourth to three-fourths of a grain, and is said to stand in efficiency midway between morphin and codein.

Dr. Darier, of Paris, read a paper before the ophthalmological society of Paris in March, 1900, in which he detailed the excellent results obtained by means of dionin in various eye diseases. The first case cited was one of hyperacute, exceedingly painful iritis of rheumatic origin. In spite of repeated atropin instillations, the pupil had failed to enlarge, the eye remaining hyperemic and sensitive to light. A very minute quantity of dionin was then introduced into the conjunctival sac, when a severe burning sensation was experienced, and the patient complained of a sense of numbness and inability to move the eye. Two leeches were applied to the temples, and an hour later the pupil was found to be enlarged to its maximum extent, and the patient felt very much relief. Two days later the patient reported that not the slightest pain had been felt since, and the pupil, remained regularly and properly expanded. Similarly good results were obtained in several other like cases. In a case of double iridochoroiditis with complete posterior synechia, however, dionin did not afford such good analgesic action. In a case of double vascular keratitis with severe pain and extreme sensitiveness to light, the dionin caused at first an acute burning sensation and distinct chemosis, after which the pain and photophobia disappeared. Pustular keratitis in children was also treated, and, although the photophobia appeared to have been lessened, as the eyes could be opened better, yet it is difficut to render a proper decision in these cases.

In a case of acute parenchymatous keratitis the improvement was very rapid, and is ascribed as being largely due to the dionin employed. One application of dionin in a case of diffuse corneal infiltration, due to severe trauma, and resembling parenchymatous keratitis, sufficed to afford relief from the severe pains that had resisted other remedies and prevented sleep. A case of rheumatic episcleritis, in which sodium salicylate was ineffective, was treated with dionin with the result that, after the acute chemosis which first ensued, not only was the pain entirely relieved, but the episcleritis cured. Similarly good results in rapidly relieving pain were obtained in two cases of recurring corneal ulcers. Similar experiments were carried out in various ocular affections with other analgesics in order to determine their efficiency when compared with dionin. All those tested, however, were either far inferior to dionin, or caused such toxic symptoms (cold perspiration, vomiting, fainting spells, etc.,) as to preclude their employment. With dionin, on the other hand, no symptoms of this kind were observed. Dionin may be injected under the conjunctiva when it will also cause chemosis, and exert an analgesic effect. In conclusion, the author says that "dionin is, for the clinician, a powerful analgesic by means of which the most severe pains in iritis, iridocyclitis, ulcers, keratitis, and even glaucoma, may be reduced and relieved."

Dionin has also been employed recently by Dr. Wolffberg (*Therap. Monatsh.*, xiv., p. 237), of Breslau, in twenty-one cases of operations for cataract, because of the excellent results previously obtained in other eye diseases with the remedy. The number, though not very large, sufficed to enable the author to fully test it in this class of operations. It appeared from the treatment that though dionin does not seem to possess antiseptic properties, it nevertheless imparts a higher degree of resistance on the part of the corneal tissues toward any pathogenic microbes present than other remedies ordinarily employed. The increased flow of tears which occurs at first acts effectively in cleansing the eye; the ensuing conjunctival chemosis helps toward a better wound closure and more rapid restoration of the chamber; the swelling of the lids renders more difficult all unnecessary movement on their part and thus helps to render the dionin of more service in treatment without bandaging. The purely mechanical effect of the dionin-ophthalmia is moreover of considerable value in every form of bandage. In fact, the author states that he has never before experienced such a sense of security in treating the wounds following operations for cataract as since using dionin.

Colleagues who have seen cases a day or so after operations performed by the author have been convinced that the absence of all irritation, and the appearance of the wound, anterior chamber, and pupil, left nothing to be desired; and, further, that the application of dionin powder to the conjunctiva immediately after the operation was never found to be unpleasant because of sensitiveness.

Just as valuable as dionin has been found to be in all perforating corneal disturbances, just so indispensable is it also in superficial corneal wounds. The author also points out that in recurrent traumatic corneal erosions, which are so exceedingly painful, the use of dionin robs the disease of a large part of its terrors, because of the analgesic action exerted by the remedy. The dionin is more particularly useful in this disease, in which cocaine can not be used because of its deleterious effect on corneal epithelial formations. In combination with atropin, dionin is besides very useful in more rapidly producing mydriasis, at times even in iritis. Further, dionin is useful in glaucoma, particularly in chronic inflamed forms, when combined either with eserine or pilocarpin, or even both.—*Merck's Reports.*

GLAUCOMATOUS IRITIS.

OCCASIONALLY a case of iritis (*Centralblatt für Augenheilkunde*, February, 1900; *Ophthalmic Review*, July, 1900,) occurs in which the tension is found to be increased and in which use of atropin is on this account attended with some risk of further evil, while if one withholds the mydriatic he is apt to be a mere spectator of the formation of disastrous synechiæ. Wagner, of Odessa, relates, at considerable length, an instance of such a condition. Briefly,it was that of a man who for a number of years had suffered yearly from acute iritis of one or other eye; the attacks were attended with much pain, with increased tension, and with copious, semi-opaque exudation into the anterior chamber; treatment of the ordinary type did not materially alter the course of the disease, and though for a long time each attack appears to have been entirely recovered from, yet in process of time as the recurrences multiplied vision had been distinctly degenerating. A paracentesis in one eye and an iridectomy in the other seemed to reduce the severity, if not the frequency, also of the successive attacks, and the use of a myotic, in spite of the risk of promoting unwelcome adhesions, undoubtedly not merely greatly relieved the acute symptoms, but also assisted largely to prevent recurrences.

GENITO-URINARY AND SYPHILITIC DISEASES.

CONDUCTED BY BYRON H. DAGGETT, M. D., Buffalo, N. Y.

THE SIGNS OF INHERITED SYPHILIS.

DAWBARN, before the New York Academy of Medicine and printed in the November number of the *American Journal of Dermatology and Genito-Urinary Diseases*, said: The mortality of children of syphilitic parents is frightful and this inheritance is frequently met in the practice of men of all specialties. Fournier, after a careful examination of statistics, states that only one child in four survived. The Moscow test of 2,000 cases gives about the same percentage. A large majority died the first year. In forty cases of acquired syphilis all recovered but one. A prompt recognition of the presence of congenital syphilis is essential. Hence a compact form of the clinical signs is important. Twenty-seven diagnostic points are herewith presented. They are not all of equal pathogenic value, but are all sustained by high authority. The symptoms and their diagnostic value will be briefly considered. There is no chronological order of involvement of this congenital disease and its symptoms will be diagnosticated as those which are early and those appearing later. The initial lesion of inherited syphilis will not be considered. (Quoting Diday and Smith):

1. "Next to the look of little old men, the most characteristic sign is the sallow color of the skin." The newborn are rarely plump, but are wrinkled like an old man, still they may be born plump and shortly become syphilitic.

2. The umbilical cord is extremely thickened and appears swollen; is apt to be very long and is slowly detached from the navel. This hypertrophy is due to a partial endophlebitis obliterans, occasionally noticed, and involves the umbilical vein.

3. Pemphigus syphiliticus—mortality almost 100 per cent. My first case was diagnosticated by my preceptor, and it died as he had predicted. The vesicular syphilide is not so fatal, but it is a very severe type of infection. In the inherited type only do we find bullæ or vesicles.

4. The common eruption is most frequently an erythema. The nodules appear upon the abdomen and genitals, pinkish at first and later coppery in color. The rash appears about three weeks after birth. The size of the spots after development is about that of the baby's finger nails. Subsequently these syphilides become polymorphosis and more irregular than those of acquired syphilis. In about 25 per cent. of inherited syphilis only do we find skin eruptions.

5. *Condylomata* often appear early and locate about the mucocutaneous junctions—commonly about the anus.

6. "*Snuffles*" is a common sign and is exceedingly suspicious.

7. Mucous patches, ulceration and later gumma about the larynx cause hoarseness.

8. Mucous patches are common and may be found upon any of the mucous surfaces.

9. Stomatitis and pharyngitis are almost constant phenomena, ulceration appearing later.

10. Enlargement of the lymphatics is not always present in the congenital type.

11. Hemorrhages and ecchymotic spots have diagnostic value. Hemorrhage from ulcerated or apparently sound mucous membranes.

12. Virchow's "white pneumonia," diagnosticated post mortem and is due to fatty degeneration of the vesicular epithelium. This condition is found in still-births and those dying soon after birth. In older cases it is interstitial pneumonia or gumma. Pneumonic signs at or soon after birth are suspicious.

13. Involvement of the liver is frequent, such as interstitial hepatitis, gummata or amyloid degeneration. Jaundice is never present.

14. Enlargement of the spleen occurs in a majority, if not in all cases and has great diagnostic value.

15. Certain eye symptoms are diagnostic—"ground glass cornea," keratitis, iritis, choroditis, retinitis and neuritis may also be found. Keratitis is the one of greatest diagnostic value.

16. Inflammation of the middle-ear, when associated with other symptoms is important as a diagnostic symptom.

Hutchinson's "triad of symptoms" are: notched teeth, ground-glass cornea, and otitis media.

17. Alopecia suggest syphilis.

18. Painless orchitis is rare, but a valuable sign.

19. Neuroses, although infrequent and occur late, yet they require careful examination; chorea, epilepsy and paralysis.

20. Osteochondritis, involving the shafts and epiphyseal junctions of the long bones is among the commonest and earliest sign.

21. Later and even more characteristic is periostitis. "Nodes of Parrot" is a notable manifestation of syphilitic periostitis.

22. Symmetrical and multiple dactylitis syphilitica.

23. Claw form of the finger nails.

24. Early appearance of the teeth, with bad color and tendency to decay. To be born with teeth is bad luck.

25. Hutchinson's teeth. Notching of the upper central incisors, peg and screw driver shapes. Found only in the permanent teeth and not always present.

26. Irregularities of bone development, found in the later stages, hypertrophies, asymmetries and necrosies, pug and saddle-back noses, and saber shape tibia.

27. Stigmata.

OBSTETRICS, GYNECOLOGY, AND ABDOMINAL SURGERY.

CONDUCTED BY WILLIAM WARREN POTTER, M. D., Buffalo, N. Y.

TREATMENT OF RUPTURE OF THE PARTURIENT UTERUS.

WENDEL (*Medical Record*, May 26, 1900,) says: There is no dividing line that can be determined between threatened and beginning rupture. Is it justifiable, then, to use forceps in high degrees of thinning? Koblank found that 10 of 80 cases of rupture were caused by forceps. Winckel and Schaeffer found that high forceps give worse results to mother. Two distinct rules are applicable to head presentations when rupture threatens.

1. When thinning of the lower segment is slight and the round ligaments are tense only during contractions, deliver with forceps.
2. When Bandl's ring is very high or very oblique, and one or both of the round ligaments are tense between pains, delivery should be effected by Cesarean section or craniotomy.

The same rule holds good for version in head presentations, the hand being substituted for forceps. The rule of action in transverse presentations is simpler, for when the child is living this fact indicates that dangerous thinning has not yet occurred and version may be attempted with deep narcosis. When rupture has occurred, delivery must be accomplished without increasing the injury. In head presentation with living fetus in utero, prompt application of forceps may save the child without increasing the mother's dangers, provided the os is completely dilated and no pelvic contraction exists. When the head remains in the uterus and the body has escaped, McLane argues that the danger of increasing the injury no longer exists, and recommends passing the hand along the child until a limb can be grasped, then rotate and deliver, instead of losing time by attempting to grasp the mobile head with forceps. A dead fetus would, of course, be delivered by perforation and cranioclasty. Spontaneous rupture with transverse presentation results almost invariably in fetal death. Embryotomy would therefore take precedence when the fetus remained either entirely or in greater part in the uterus. If rupture occurs during version the operator must judge whether he had better continue or not; in general the child should have a chance for life. When the child escapes entirely into the peritoneal cavity, the conjugate diameter measuring less than 8 cm., abdominal section will be necessary.

PUERPERAL INFECTION.

H. W. **Longyear** (*Canada Medical Record*, July, 1900,) states that the early diagnosis and treatment of pseudo-membrane by topical applications is of great importance.

The intrauterine douche frequently applied is of the most value in the forms of infection unattended by the formation of a pseudo-membrane. The vaginal use of peroxide of hydrogen is helpful in all forms of infection. Frequent packing of the vagina previously dried with iodoform gauze is especially useful in cases with pseudo-membrane. In the general treatment he gives quinine twice daily, whiskey and strychnine to support the heart, nuclein and protonuclein in all cases, mercurial and saline cathartics at first in all cases, then as indicated. Serum therapy to be applied where the Klebs-Löffler bacillus or the streptococcus can be demonstrated by the bacteriologic examination. Streptococcus antitoxin serum to be used persistently to prevent pus formation and symptoms of systemic infection.

PREVENTION OF CONCEPTION.

In a discussion of this delicate theme before the Hamburg Obstetrical Society (*Centralblatt für Gynakologie*, 1900, No. 18) various methods were proposed, none of which appeared to be certain. Objections were made to so-called occlusive pessaries, since they frequently give rise to endometritis, and were harmful in cases of inflammatory disease of the pelvic organs. It was agreed that under some conditions the physician was justified in trying to prevent conception.

In cases of extreme pelvic contraction, tuberculosis and other wasting diseases, it was advised that ligation or resection of both tubes must be practised when the abdomen was opened for other reasons.—*Am. Jour. of Med. Sciences.*

DYING DECLARATIONS IN ABORTION CASES.

The Supreme Court of New Jersey (*Jour. of the American Medical Association*) holds, in the case of State vs. Meyer, that, upon an indictment framed under the provisions of section 119 of the Crimes Act of 1898, which charges the defendant with using an instrument upon the person of a pregnant woman, with intent to cause her miscarriage, and that the defendant's act caused the death of the woman, evidence of the dying declarations of the deceased is inadmissible. The reason given is that death is, in New Jersey, no longer in any case an essential element of the crime denounced, but is to be considered solely with respect to the punishment to be inflicted after conviction, which the court holds renders inadmissible the dying declarations.

INDIVIDUAL SIGNS OF PREGNANCY.

O. **Naegele** (*Medical and Surgical Monitor*, August, 1900,) has observed that women who have previously suffered from phlebitis or thrombosis of the veins of the lower limbs, especially in the saphenæ, have a prompt and reliable pregnancy barometer in their varix. Some multipara can affirm their pregnancy in eight days after conception from the condition of their varix. Women who have had puerperal complications with exudates and formation of adhesions, frequently experience a revival of symptoms at these points immediately after conception, the locus minoris resistentiæ proving an index of pregnancy. In two cases a thrush formation was noted on the external genitals, causing pain on urinating. He concludes his article in the *Muench. Med. Woch.*, of June 12th, calling attention to the valvular formation at the external orifice of the urethra in women, which forms a right-angled closure with a slit in the middle. It is most pronounced in virgins and in persons who have never masturbated.

INJURY TO THE SKULL IN NARROW PELVES.

Hermann (*Allg. med. Central-Zeitung*, February 17, 1900,) exhibited at the recent meeting of the Schlesische Gesellschaft für vaterländische Cultur a child with a marked funnelshaped impression upon the vertex acquired in connection with the operation of turning and extracting.

The woman was an VIII-para. No history of rickets. Five of the eight labors required operative interference, either turning or perforation. The ninth labor set in very deliberately. On account of failure of child to advance, the author's help was invoked. Child in second vertex position. Somewhat pendulous abdomen. Head movable in superior strait. Diagonal conjugate measured 11 cm.

A hypodermic of morphia was given for the exhaustion, to enable the mother to regain some of her lost strength. The head soon afterward engaged in typical occipital presentation. Here was an indication for version. On account of early rupture of water this operation was difficult, and energetic traction was necessary before the child could be extracted. Child born asphyxiated, but was revived. The want of proportion between fetal skull and maternal pelvis had left its mark —a deep funnel-shaped impression over the right parietal measuring 6¼ cm. long and 3½ cm. broad. The pelvis was found to be of the simple flat variety, with a true conjugate of 9.5 cm.

The child is now 10 weeks old, and has had no trouble of any sort. No external or internal hemorrhage had occurred.

Comparing the present state of the child's head with photographs made eight days after labor, we see that the lesions has considerably improved, but there can be no doubt that it is destined to be permanent through life.

An inspection of the literature of the subject shows that these impressions are of very infrequent occurrence. Ahlfeld has seen but ten cases in 3,000 labors. The prognosis is better than in other forms of injury to the cranial bones—fissures, fractures, etc. Remote effects involving the development of the encephalon are unknown.

This lesion is typical of the result of extracting the aftercoming head in contracted pelvis. A short, violent effort of traction is requisite for its production. Such an experience can be eminently dangerous for a child, and the favorable issue of the author's case should not make us oblivious of the usual prognosis in such instances (mortality in version in contracted pelves 36 per cent.)—*Obstetrics*, July, 1900.

PREGNANCY IN THE FIMBRIATED EXTREMITY OF THE FALLOPIAN TUBE.

DR. W. B. DORSETT (*St. Louis Courier of Medicine*, August, 1900,) presented to the Obstetrical and Gynecological Society a specimen of a fetus from this condition. The patient had been curetted by another physician for a supposed miscarriage; following this the abdomen became very much distended and tense. When seen by him, the patient had a temperature of 102°F., and a very weak pulse while a mass filled the lower abdomen as high as the umbilicus. Pelvic abscess was diagnosticated and the patient was prepared for operation. Under anesthesia, a large retrocele was found occupying the vagina, which gave a feeling of fluctuation. When incised, a large quantity of clotted blood escaped. Introducing the hand, a fetus was removed, together with a quart and a half of clotted blood. The ovary could not be outlined, but a ragged portion of the tube could be felt near the fimbriated extremity and it was assumed that this was a case of gestation in the fimbriæ. Nothing was found having the appearance of placental tissue. Patient's temperature and pulse immediately improved and she recovered, though a purulent discharge continued for some weeks. In this case there was no history of sterility, often found in cases of extrauterine pregnancy, no history of shock, or of a rupture, or of fainting; no sudden pain, though there were pains simulating those of uterine contractions which misled the patient and her physician into the belief that she had miscarried and for which he had curetted the uterus, removing what was undoubtedly the decidua.

Abstracts.

PREVENTION OF INFANT MORTALITY.

Ernest Wende, Health Commissioner of Buffalo (*Pediatrics*), in his annual report insists that it is necessary for state and municipality to have supervision over the milk supply.

1. Continuation of the license system with penalties, together with stringent ordinances covering quality, adulteration, sanitary care, and relation to contagious disease contamination.

2. Milk should comply with the state standard as determined by lactometer tests, periodically instituted both in milk houses and on wagons.

3. Sanitary nonabsorbent milk-rooms of determined size, air-space, ventilation, and light; with specially constructed, indirect-plumbed cooling and storage boxes not communicating with sleeping rooms, privies, stables, or other influencing rooms.

4. Wagons properly lettered and numbered, with protection from summer heat.

5. Stringent prohibition regarding intercourse with houses containing contagious diseases, particularly relating to the exchange of milk bottles and the prohibition of refilling milk jars en route. The constant surveillance of contagious disease in relation to milk routes by means of "tell-tale register."

6. Obligatory cleansing of milk utensils by a uniform method, and of cans before returning to the dairy.

7. Special supervision of and discouragement, if not abolishment of the sale of milk in groceries and similar stores where the business is surbordinated to other interests and consequently lacks protective facilities.

United States and city act in unison in this, where interests are identical, the adoption of arbitrary interdiction or destruction at the city line of all milk coming from unsatisfactory dairies.

Systematic reports, and mutual warnings and notification of imperiling conditions.—*Medical and Surgical Monitor*, August, 1900.

REPORT OF THE COMMITTEE OF THE AMERICAN SURGICAL ASSOCIATION ON THE MEDICO-LEGAL RELATIONS OF THE X-RAYS.

By J. WILLIAM WHITE, M. D., of Philadelphia, Chairman.

[*American Journal of Medical Sciences*, July, 1900.]

CONCLUSIONS.

1. The routine employment of the *x*-ray in cases of fracture is not at present of sufficient definite advantage to justify the teaching that it should be used in every case. If the surgeon is in doubt as to his diagnosis, he should make use of this as of every other available means to add to his knowledge of the case, but even then he should not forget the grave possibilities of misinterpretation. There is evidence that in competent hands plates may be made that will fail to reveal the presence of existing fractures or will appear to show a fracture that does not exist.

2. In the regions of the base of the skull, the spine, the pelvis, and the hips, the *x*-ray results have not as yet been thoroughly satisfactory, although good skiagraphs have been made of lesions in the last three localities. On account of the rarity of such skiagraphs of these parts special caution should be observed, when they are affected, in basing upon *x*-ray testimony any important diagnosis or line of treatment.

3. As to questions of deformity, skiagraphs alone, without expert surgical interpretation, are generally useless and frequently misleading. The appearance of deformity may be produced in any normal bone, and existing deformity may be grossly exaggerated.

4. It is not possible to distinguish after recent fractures between cases in which perfectly satisfactory callus has formed and cases which will go on to non-union. Neither can fibrous union be distinguished from union by callus in which lime-salts have not yet been deposited. There is abundant evidence to show that the use of the *x*-ray in these cases should be regarded as merely the adjunct to other surgical methods, and that its testimony is especially fallible.

5. The evidence as to *x*-ray burns seems to show that in the majority of cases they are easily and certainly preventable. The essential cause is still a matter of dispute. It seems not unlikely

when the strange susceptibilities due to idiosyncrasy are remembered that in a small number of cases it may make a given individual especially liable to this form of injury.

6. In the recognition of foreign bodies the skiagraph is of the very greatest value; in their localisation it has occasionally failed. The mistakes recorded in the former case should easily have been avoided; in the latter they are becoming less and less frequent, and by the employment of accurate mathematical methods can probably in time be eliminated. In the meanwhile, however, the surgeon who bases an important operation on the localisation of a foreign body buried in the tissues should remember the possibility of error that still exists.

7. It has not seemed worth while to attempt a review of the situation from the strictly legal stand-point. It would vary in different states and with different judges to interpret the law. The evidence shows, however, that in many places and under many differing circumstances the skiagraph will undoubtedly be a factor in medico-legal cases.

8. The technicalities of its production, the manipulation of the apparatus, etc., are already in the hands of specialists, and with that subject also it has not seemed worth while to deal. But it is earnestly recommened that the surgeon should so familiarise himself with the appearance of skiagraphs, with their distortions, with the relative values of their shadows and outlines, as to be himself the judge of their teachings, and not depend upon the interpretation of others who may lack the wide experience with surgical injury and disease necessary for the correct reading of these pictures.

[These conclusions were unanimously adopted as expresssing the views of the American Surgical Association.]

THE OPIUM HABIT IN THE EAST.—The extent to which the opium habit prevails amongst Europeans in the East is only properly appreciated by those specially brought into contact with the victims; they will be interested in the announcement made by Dr. Neil McLeod, of Shanghai, that it is possible to cure the habit by the administration of sodium bromide. He gives the drug "in two doses of two drachms, in solution, every two hours for the first two days, and one drachm on the third day," and adds that "three ounces of the drug in all will probably suffice in most cases." The treatment is quite safe and is well worth trying.—*Journal of Tropical Medicine*,

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HOW SHALL RECIPROCITY IN LICENSURE BE ESTABLISHED?

UNTIL a few years ago the opprobrium of medical education in the United States was the admission of candidates to the doctorate degree with inadequate preparation. American diplomas for this reason, with few exceptions, were denied recognition. A limited number of our colleges demanded a preliminary education for admission, and required a longer period of training, but the rule was little or no preliminary qualification and only two years in college, most of which was spent in attendance upon didactic lectures.

Every foreigner, however, who presented a diploma, no matter where or how obtained was admitted to practise unchallenged. Here was reciprocity with a very small "r;" it was a kind of reciprocity that didn't reciprocate.

Within the last few years a considerable number of states have established examinations for license, each regulating the methods as to preliminaries and training according to environment, political conditions, geographical situations, the liberal education of legislators, sentiment, and other factors entering into a solution of the question in the several commonwealths. While all have had a single object in view—namely, an improved and better educated medical profession, there has yet been lack of homogeneity in laws and regulations among the several states. As a consequence, standards have varied sufficiently to make it impossible for licentiates to obtain interstate indorsement of their credentials without injustice to those whose licenses were granted by states having highest standards. In other words, a physician holding a license from a state having the lesser standard, could not pass to a state having a greater standard without examination by the examining board representing the latter state. Thus, it is easy to understand why a state will not admit those to practise within its borders, who hold licenses obtained under systems less rigid than it applies to its own citizens. The state is zealous of its rights and guards the interests and privileges of its own citizens. Very properly so.

It is a mistake to hold examining boards responsible for these apparent incongruities. Each state fixes its own laws, regulates its own standards, and then appoints an examining board to execute them. The functions of the boards are administrative not creative. There has been much discussion in societies and journals as to the methods of establishing interstate reciprocity, but among it all we have seen nothing in print that presents the matter with greater clearness or intelligence than an article in the editorial columns of the New York *Medical Record*, issue of July 28, 1900, which we take pleasure in reproducing in its entirety, to-wit:

THE NEED OF UNIFORMITY IN THE STANDARDS OF MEDICAL EDUCATION.

During the current year attention has been called on several occasions in the *Medical Record* to the question of interstate reciprocity in medical licensing and the best means of bringing about this most desirable event has been touched upon. On February 10th in an article "Medical Education in the United States," the opinion was given that the National Confederation of State Medical Examining and Licensing Boards was the only body fitted by its composition to deal efficiently with the matter, and that to it must be left the solving of the problem, and the hope was then expressed that at its meeting at Atlantic City a discussion of the subject in all its bearings might tend to evolve order from the present decidedly chaotic condition of affairs.

We are glad to say that this hope has been realised to a considerable extent. The Confederation met in Atlantic City on June 4th, and the reciprocity difficulty was pretty thoroughly threshed out. Drs. William Warren Potter, of Buffalo; James A. Eagan, of Springfield, Ill.; E. B. Harvey, of Boston; J. N. McCormack, N. R. Coleman, of Columbus, Ohio, and others took part in the discussion. The agreement was unanimous as to the need of reform in the existing state medical laws, but the concensus of opinion was that any movement to this effect should be deliberate and well considered, and that nothing should be done hastily. The National Confederation appointed an interstate reciprocity committee consisting of the following members: Dr. Spurgeon, of Indiana, chairman; Dr. Amberg, of Detroit, secretary; Drs. Harvey, of Massachusetts; Korndoorfer, of Pennsylvania; and Swarts, of Rhode Island. The section on state medicine of the American Medical Association appointed an interstate reciprocity committee of three: Dr. Motler, of Washington, D.C., chairman; Drs. Amberg, of Detroit and McIntire, of Easton, Pa.

That interstate reciprocity is badly needed will be allowed by all, but that under the present conditions it is impossible is a fact just as indisputable. The first steps to be taken is the introduction, as far as is possible, of a uniform standard of medical education throughout the country. Mr. James Russell Parsons, the author of an excellent monograph on the subject, suggests as a uniform standard for admission to medical practice in all parts of the United States is at present impracticable, that instead of the adoption of a separate standard for almost every political division two, or at most three, standards should answer for all. One phase of the situation is both noteworthy and satisfactory; the members of the medical profession of this country are becoming more and more alive to the incongruity, not to say absurdity, of the existing methods of medical education in the various states. After all, the remedy lies in their own hands. If they determine that the standards shall be raised and placed upon a uniform plane, all obstacles will quickly melt away.

The whole question of reciprocity really depends upon a uniformity of educational methods to be adopted by the colleges. When this is done there will be no difficulty in establishing interstate indorsement. Until that desirable consummation is reached all attempts of reciprocity will prove futile. We have on more than one occasion presented this view of the question to our readers, and take pleasure in adding our full indorsement to the able and forceful review of the situation by our esteemed contemporary as above quoted.

THE ETHICAL SCHISM IN NEW YORK.

THE journals have contained much of late regarding the relationship of the two state medical bodies that claim coequal powers under the law, much of which is misleading and some of which is absolutely devoid of truth. The fact is that very few outside of this state know that the elder organisation—The Medical Society of the State of New York—has been the recognised professional and official society since 1806, and that the younger body—The New York State Medical Association—was organised in 1884.

Last winter the latter obtained a charter from the legislature and has given out that it is equal in legal power with the parent society. This question of legal rights and power is now being tested in the courts, which alone can decide disputed law points, and until the decision is finally handed down from the highest tribunal, opinions in the premises will be valueless, hence had better be reserved.

As bearing on the question of ethical differences that separate the two state organisations, our esteemed contemporary, the *New York Medical Journal*, in its issue of August 18, 1900, has spoken most wisely in its editorial columns. We esteem it a pleasure to reprint the article in question, which is as follows:

THE AMERICAN MEDICAL ASSOCIATION AND THE MEDICAL SOCIETY OF THE STATE OF NEW YORK.

Except for the ebullition which occurred at the Denver meeting of the American Medical Association, a discreet silence has been observed for several years concerning the forfeited affiliation of the Medical Society of the State of New York with the national organisation. There has been a general feeling that time alone would heal the breach that is more apparent than real. If anybody was qualified to break that silence, it was Dr. Jacobi, and he has ventured to do so in an address delivered before the International Medical Congress in Paris. Dr. Jacobi's statement of the case is clear and candid, and his long and spotless career will give weight to his words, albeit they savor of the pathetic.

Evidence has for some time been accumulating that the profession is weary of the awkwardness which is sometimes the unavoidable outcome of the position in which the New York Society placed itself some years ago. We believe that the American Medical Association is rapidly approaching the attitude of being willing to modify its code of ethics to suit changed conditions, and certainly there have been vast changes since the time when the present code was adopted. We believe, too, that the Medical Society of the State of New York, while unable to take the initiative in the movement for reconciliation, is prepared to welcome any conciliatory measures that the central organisation may feel like taking. We earnestly hope that we are not mistaken in our interpretation of the signs on which we found our auspicious forecast, and we know, that that hope and that interpretation are shared by a great number of the prominent members of the profession throughout the country. We feel sure, also, that the physicians of the State of New York have no such false pride as would prompt them to look askance upon the olive branch. The present situation is anomalous, it is monstrous; it may be righted speedily and thoroughly if men who are friends in private life can bring themselves to mutual concession in corporate action. Several months are yet to elapse before the St. Paul meeting is held. Let us hope that that meeting will put an end to the estrangement between the American Medical Association and the Medical Society of the State of New York.

The *Journal*, as will be observed, makes the address of Dr. Abraham Jacobi, at the 13th International Medical Congress, at Paris, the basis of its remarks. Dr. Jacobi is familiar with the whole question, was a prominent actor in the scenes preceding the division in the old society and the formation of the new association, and knew whereof he spoke. Moreover, his high standing throughout the world, entitles him to a considerate hearing. Therefore we reproduce a portion of his address, taken also from the issue of the *Journal* previously referred to. We invite a careful reading of it, which is as follows:

MEDICAL ETHICS IN THE UNITED STATES.

The ethical conscience of the physicians of the United States is exhibited in a great many ways. It is considered unethical for a doctor to own a drug store or a part of it; ever to take a patent on any invention of his own; ever to recommend over his name a patented instrument, a proprietary food, or medicine, or mineral water. That is illustrated by what happened to the famous Morton after his successful demonstration of the anesthetic effect of ether in the Massachusetts Hospital. After having extracted a tooth on September 30, 1846, without giving the patient any pain, he applied immediately for patent rights and sold individual office rights. Moreover, he kept his composition, which he called 'letheon,' a secret. It was then that the profession turned against him and forced him to admit that his 'letheon' was sulphuric ether disguised by some aromatic oil. A medical man in America is forbidden ever to advertise his name, or office hours, or his specialty in a newspaper or lay magazine, ever to announce his specialty, if any he have, on his cards. If reports of cases or operations of same physician appear repeatedly in the public press, it is taken for granted that it has not been without his knowledge, consent or prompting. All of these things impair a medical man's professional standing; they render him an improper candidate if ever he applies for membership in a medical society, or make him, if he be a member, the subject of discipline.

Many of the rules accepted by American medical men are contained in a book compiled by an Englishman, Percival, in 1807. It was received as the code of ethics of the American Medical Association in 1847, and is still obeyed by those who know the book or who do not know it, or even by those who never know of its existence. One of the regulations of the code forbids consultations with homeopaths.

It is hardly necessary to say to those of you for whom the practice of medicine is not only diagnosis and autopsy, but the treatment and cure of the patient in whose behalf a consultation is to be held, that when medical treatment is in question you cannot agree with a homeopath who is a Hahnemannian; and you do not want to meet a homeopath who, because the name is still fashionable and for a portion of the misinformed public the subject of an almost religious fanaticism, employs that title for meretricious purposes. Still there are cases in which it would be inhuman to refuse a consultation. Not only were such consultations held from olden times, but even in large cities exceptions to the rule have always been frequent, indeed too frequent in my opinion. Moreover, whoever is acquainted with smaller cities and villages, where a homeopath is the only rival or companion of the regular physician, knows that for either it would be suicidal to refuse a consultation. Only lately one of the medical men most widely know for his wisdom, in the American Medical Association and the profession at large, Dr. S. C. Busey, of Washington, proclaimed that the rule forbidding such consultations should be so modified or explained as to permit them in cases of emergency. This is exactly what the Medical Society of the State of New York made its official policy in 1882. We considered it more honest to admit by law what was constantly being done, and to decree precisely that for the reasons of humanity and in an urgent case a consultation should not be refused. For this sin we, the body of the Medical Society of New York, were expelled from the American Medical Association.

THE PHILADELPHIA MEDICAL JOURNAL AND THE PEOPLE OF THE STATE OF NEW YORK.

THE organisation of the medical profession of this state expresses the will of the people, as well as the advice and consent of the profession, as the same has been proclaimed at various times since 1760 down to the year 1882. Since the later date a small minority of the profession has failed to concur in the decision of the majority upon a question of the interpretation of a part of the medical law of the state, has seceded from the regularly organised medical societies, general and local, is striving to form rival organisations throughout the state, and the Philadelphia *Medical Journal* seems to be its organ.

Upon two occasions that journal has attacked the mode of medical organisation of this state. After reading the first we characterised the same as "ignorant, illogical and misleading." We have considered the second contribution and would remark that the onslaught now appears vicious and immoral.

Referring to the organisation of the Medical Society of the State of New York, the first article gave the following:

> Membership in the State Medical Society is obtained only through the election of a member of a county society or delegate for the annual meeting of the State Society, each county society being entitled to as many delegates as there are assembly districts in the county in which it is located. . . . . It is evident that a glaring fault in this method of representation lies in the fact that a clique in any county society may almost certainly and indefinitely prevent the election of a nominee and it is equally that all the members of any one of the county societies cannot obtain membership in the parent

body, no matter how strong their desire may be. . . . . A body thus organised cannot fairly represent the bulk of the profession of the state, nor can it do so until such restrictions to general membership are removed.

We hold that in scientific discussion inaccuracy is of the nature and essence of immorality; that good taste requires of a writer that he be careful of his facts and, further, that when an editor presumes to meddle in the affairs of others that truthfulness is demanded by common decency.

How far the seceder's organ is inaccurate and all the rest of it, the facts in the case will show.

The society in question is composed of delegates, permanent and honorary members. Delegates are sent by county medical societies, medical colleges, incorporated and voluntary medical societies and the Academy of Medicine of New York. The last report of the society shows that in addition to the county medical societies, twenty medical societies and medical institutions are represented by their duly selected delegates.

Perhaps we may suppose that our "has-been-thoroughly-conversant" critic omitted these important institutions for the sake of brevity.

However, our unpardonable sin yet remains. The several bodies which make up the constituency of the state society may only send delegates; not all the members of the faculties of the several medical colleges may be sent at one time, and not all the members of the voluntary medical societies may be so sent; the iron rule of representative delegate attendance is demanded of all alike. This may be all wrong in principle and in practice, but it is quite American.

We do not assume to have peculiar knowledge as to the advantages and purposes of "*les imbéciles.*" We hear they often write and sometimes get printed, but we do not remember to have been particularly edified by their contributions; and, in spite of what they or others may say or write, our present expectation is that so long as we elect to live in this land, we shall hold with the fathers for government by constitution and majority, and in representation by constitutionally selected minority.

When our "cerebration" compels us to declare, that of our fellows none is great or good enough to represent us, we will try to emigrate, and if the police think differently we will go as quietly as we may to the repair-shop where they tinker and sometimes mend think-tanks.

THE NEW YORK MEDICAL JOURNAL CHANGES PUBLISHERS.

THE *New York Medical Journal* so long published by D. Appleton & Company has passed into the hands of Mr. A. R. Elliott, the head of a prominent advertising house, who becomes sole owner and publisher. Those who have known the house of Appleton during all the years of its splendid career will keenly regret the circumstances that have led to this change.

It is hoped and believed that the new publisher will conduct the *Journal* on a high plane. The fact that Dr. Frank P. Foster is retained as editor indicates this purpose.

It has been an exponent of high class medical journalism for so long a period under its accomplished editor, that we take this occasion to offer to the new publisher congratulations upon his announced decision to retain Dr. Foster.

In writing of this change of publishers the New York *Medical Record* in a recent issue commented as follows:

> We understand . . . that the editorial department will remain in charge of the present editor, to whose able management for so many years the *Journal* owes its high professional standing.

In commenting further upon the change of publishers the *Medical Record* refers to the financial problems involved in the conduct of a medical journal as follows:

> It will doubtless be a matter for surprise to the great majority of the profession to learn that a medical journal apparently so prosperous was financially a failure, and it will perhaps dispel the idea which seems to prevail that the profits of publishing medical journals are fabulously large. Those who have had experience in such matters know well that the publication of a medical journal is very different from that of an illustrated magazine for the general public. The latter can be sold at a price irrespective of the cost of manufacture, and thereby secures an enormous circulation, the profit on the undertaking being derived wholly from the advertisements. The number and variety of the latter which can be secured for a monthly magazine are practically unlimited, whereas in the matter of reputable medical advertising there is a very sharply defined limit. This change of ownership of the *New York Medical Journal* may serve to impress the truth of the facts just stated upon the minds of more or less experienced financial backers of some other of our contemporaries which are now being published at a heavy loss.

Here is a hint that may well be pondered by subscribers. It ought to stimulate them to prompt payment of subscription bills.

Printers demand prompt payment, a fact that all considerate subscribers appreciate. The BUFFALO MEDICAL JOURNAL has much reason for satisfaction in this regard, for which it takes this occasion to thank its supporters most heartily.

THE COLLECTION OF GARBAGE AGAIN.

THE article on the collection of garbage, published in these columns last month, aroused a great deal of public interest which took the form of a widespread action looking to the abatement of the nuisance. The daily newspapers took the matter up and the demand for a change in the collection system was general. A petition was begun and within a very short time something like 13,000 names were presented to the Board of Public Works, which with the interests of the city in view, presented the whole matter to the Board of Aldermen, with a recommendation that a change be made at once. The members of the Board of Aldermen, with that utter disregard for public affairs in which they have no personal or pecuniary interest, took the matter up and after looking it over, calmly sent it to a committee where it will remain until the Board goes into session again after the summer vacation. This is the usual method when the board desires time to either put on the screws or to look into a public matter with a view to promoting their own interests.

Whatever may have been the object of the board in taking the action it did in this matter, the fact remains that the question is one not of personal profit, but one of public health, and the sooner the eminent financiers on the board of aldermen learn to separate financial and sanitary matters the better it will be for the city's interests. A patent fact in connection with the juggling of the proposed change is that the men who were most anxious and fought the hardest for reference to committee, were the men who were members of that committee to which the whole matter was referred. To those versed in municipal matters there is but one construction to be placed on this action. Before the matter can be acted upon the committee must report back to the board. If the report is unfavorable that ends it for the time being, so far as that committee is concerned. And it is notorious that aldermanic committees do not make favorable reports on matters in which contractors are interested until they have had "hearings" which may be interpreted any way one wishes and according to one's familiarity with the methods of the Board of Aldermen.

En passant, it ~~might be remarked that~~ just previous to the days of the Broadway Railroad's connection with the New York Board of Aldermen there were several of these "hearings" and shortly afterward there was a wholesale exposure and those of the members of that Board of Aldermen who did not suddenly move to Canada transferred their spheres of usefulness from the City Hall to the State Prison at Sing Sing under sentence for "boodling."

The daily newspapers deserve the thanks of the people of Buffalo for the unanimity of action in the garbage matter and there is every indication that when the Board of Aldermen gets together again they will have had time to read and digest the newspaper criticisms of their action and be prepared to declare themselves. They should consider carefully and deliberately the statement made in more than one of the Buffalo newspapers and on more than one occasion that the mode of procedure looked, to say the least, "suspicious;" yet this board has been under suspicion so often of late that it is apparently becoming used to it and will probably pay little attention to existing public feeling until the weight of suspicion crushes them. There is such a thing.

PERSONAL.

DR. FRANCIS E. FRONCZAK and Mrs. Fronczak have returned from their European tour. They traveled about the continent for four months, as outlined in the itinerary printed in the May issue of the JOURNAL.

Dr. Fronczak spent some time in study in the clinics of Cracow, Lemberg and Warsaw, and took part in the Ninth Congress of Polish physicians and scientists at Cracow, which was attended by over 1,000 members, where he delivered an address on Medicine in America. It was well received and will be printed in full in the Polish medical journals. He also attended the 500th. anniversary of the foundation of Cracow University, as the special delegate from the University of Buffalo; other delegates were present from Chicago, Johns Hopkins, Harvard, Catholic University of Washington and Georgetown University. England had representatives from Oxford, Cambridge, Edinburgh, Glasgow and other universities. He attended the Thirteenth International Congress, at Paris, visited the Exposition and has returned with increased physical and mental vigor.

Dr. Fronczak is civil service commissioner of Buffalo and one of our most accomplished Polish physicians.

Dr. Helen J. C. Kuhlman, of Buffalo, assistant physician at the Buffalo State Hospital, was naturalised as an American citizen by County Judge Emery recently. Dr. Kuhlman was born in Germany and has lived in the United States thirteen years. She is the first woman to be naturalised in County Court since Judge Emery came to the bench.

Dr. George E. Brewer, U. of B., '84, of New York, has been appointed junior surgeon to Roosevelt Hospital with continuous service. Dr. Brewer was a pupil of the late Prof. Julius F. Miner, of Buffalo, and is gradually and assuredly acquiring a strong position among the foremost surgeons in the metropolis.

Dr. Albert H. Macbeth, formerly of Buffalo, and Dr. Harriet Stemen, of Fort Wayne, Ind., were married, July 3, 1900, at the home of the bride's parents, Dr. and Mrs. C. B. Stemen, of Fort Wayne. Dr. Macbeth's many Buffalo friends will unite in congratulations upon this joyous event.

Dr. M. B. Searls, U. of B., '69, has recently been re-elected a member of the school board of East Aurora. Dr. Searls has proven a good officer and his return to the board for another term is a proper recognition of his services.

Dr. F. G. Haines, of Warren, Pa., spent two weeks in Buffalo during the month of August, 1900, visiting the several hospitals of the city, studying surgical technique. He was much pleased with his visit.

Dr M. F. Clausius, U. of B., '91, of Barrington, Ill., has been appointed acting assistant surgeon U. S. Army, and expects to leave for his post of duty in the Philippines early in September.

Dr. George N. Jack, U. of B., '95, was elected a member of the school board of Depew, at the recent annual meeting. This is a good selection and means progress in our new suburb.

Dr. Eugene A. Smith, of Buffalo, has removed his office and residence from 831 Ellicott Street to 1018 Main Street. Hours: 1.30 to 3.30 p.m. Telephone, Tupper 342.

Dr. Sidney A. Dunham, of Buffalo, is spending a few weeks in New York, studying diseases of the nervous system under the direction of Dr. Frederick Peterson.

Dr. Frederick W. Love, of Buffalo, has been appointed physician of the fourth health district to fill a vacancy caused by the death of Dr. G. W. Lewis.

Dr. H. T. Williams, of Rochester, has removed his office and residence from 52 Clinton Place, to 274 Alexander Street. Telephone 338.

OBITUARY.

Dr. Buel Goodsell Streeter, of Glens Falls, N.Y., died at his home in that city July 24, 1900, aged 68 years. He entered the volunteer service during the civil war as assistant surgeon of the Ninth New York Cavalry, was promoted to surgeon of the Fourth New York Cavalry, May 29, 1863, resigned September 24, 1863, re-entered the service as surgeon U. S. Volunteers and became medical director of the army of the Shenandoah. After he was mustered out of service he returned to Glens Falls, where he entered upon the active practice of medicine, and thus continued until a short time before his death.

Dr. Streeter was one of the first citizens of the region of his residence, served prominently as a member of various medical societies, took active interest in educational matters and was for many years chairman of the local school board. He was for a long period president of the board of pension examining surgeons at Glens Falls and a companion of the Military Order of the Loyal Legion. He died respected by the entire community and his funeral was very largely attended. His widow, a son, Dr. F. B. Streeter, and two daughters survive.

SOCIETY MEETINGS.

THE BUFFALO ACADEMY OF MEDICINE.

OFFICERS—SESSION, 1900–1901.

President, Marcel Hartwig; secretary, Thomas F. Dwyer; treasurer, Charles S. Jewett; trustees, Joseph W. Grosvenor, three years; Stephen Y. Howell, two years; Benjamin G. Long, one year. The vice-presidents by virtue of being chairmen of the various sections are: Eli H. Long, chairman section of medicine; Marshall Clinton, chairman section of surgery; Albert J. Colton, chairman section of obstetrics and gynecology; Eugene A. Smith, chairman section of pathology; ; Frank W. Hinkel, chairman section of ophthalmology, otology and laryngology. The council is, therefore, composed of the aforementioned officers, the president of the Academy of the previous year, Matthew D. Mann, and the secretaries of the sections, who are: Julius Ullman, secretary section of medicine; Frederick H. Millener, secretary section of surgery; William G. Ring, secretary section of obstetrics and gynecology; Francis W. McGuire, secretary section of pathology; George F. Cott, secretary section of ophthalmology, otology and laryngology.

PROGRAM, 1900–1901.

September 4th, Surgery—Angioma, Vertner Kenerson. Resection of joints, with cases, Herman Mynter.

September 11th, Medicine—Quarterly meeting of the Academy. Clinical quantitative estimation of proteid digestion in the stomach, with demonstrations, A. L. Benedict.

September 17th, Ophthalmology—Eye-strain or gastric reflex? A. L. Benedict.

September 18th, Pathology—Modern theory of the action of the toxins and antitoxins, G. H. Clower. Blood examinations, H. G. Matzinger.

September 25th, Obstetrics. Subject and essayist to be announced.

October 2d, Surgery—Surgery among the American aborigines, A. L. Benedict. Subject to be announced, J. Henry Dowd.

October 9th, Medicine--On the involvement of the nervous system in malaria, with the report of a case of malaria presenting the symptoms of disseminated sclerosis, with necropsy and exhibition of slides, W. G. Spiller, Professor of nervous diseases, Philadelphia Polyclinic.

October 15th, Ophthalmology—Symptoms and treatment of chronic tonsillitis, Frederick H. Millener. The tonsil as a part of infection, Julius Ullman.

October 16th, Pathology—The significance of the Klebs-Löffler bacillus in the throats of persons physically well, William G. Bissell. Investigations on causation of malaria by mosquitoes, Irving P. Lyon.

October 23d, Obstetrics.—Subject to be announced, H. D. Ingraham.

November 6th, Surgery—The treatment of impotency, C. F. Durand. Surgical complications of typhoid fever, Vertner Kenerson.

November 13th, Medicine—Paresis and pseudo-paresis, Arthur W. Hurd. A case of asthenic bulbar paralysis, William C. Krauss.

November 19th, Ophthalmology—Discussion: The relation of tuberculosis of the larynx to pulmonary tuberculosis. Opened by DeLancey Rochester.

November 20th, Pathology—Prostatic hypertrophy, Herman Mynter. Pathology of stone in bladder, W. D. Green.

November 27th, Obstetrics—Subject to be announced, C. C. Frederick.

December 4th, Surgery. Quarterly meeting of the Academy. Subject to be announced, Stephen Y. Howell. Treatment of septic peritonitis, Eugene A. Smith.

December 11th, Medicine—Cyclic or periodic vomiting in childhood, Charles G. Stockton. The treatment of disease, locally, by hot air, Prescott LeBreton.

December 17th, Ophthalmology—Discussion: Strabismus and its treatment, a reconsideration. Opened by A. A. Hubbell.

December 18th, Pathology—The pathology of brain diseases, William C. Krauss. Morbid gastric physiology, A. L. Benedict.

December 25, Obstetrics—The obstetrical and gynecological clinics of Europe, P. W. VanPeyma. The kidneys and their relation to operations, Stephen Y. Howell.

January 1st, Surgery. Subjects to be announced, Chauncey P. Smith Marcel Hartwig.

January 8th, Medicine.—Arterio-sclerosis, DeLancey Rochester; Reminiscences of malaria, D. A. Morrison.

January 15th, Pathology—Sarcoid and sarcoma growths, J. C. Johnson, Assistant Pathologist, Cornell University. Urticaria, Grover Wende.

January 21st, Ophthalmology—Subject to be announced, Arthur G. Bennett.

January 22d, Obstetrics—Post-operative treatment after abdominal section, Lillian C. Randall.

February 5th, Surgery—Operative treatment of tubercular lymphomata of the neck, Prescott LeBreton. Subject to be announced, C. C. Frederick.

February 12th, Medicine—The value of clinical pathology, A. E. Woehnert. Pemphigus, with record of a case, J. W. Grosvenor.

February 18th, Ophthalmology—The inter-relationship of eye and ear diseases, E. E. Blaauw. The eye in nervous diseases, William C. Krauss.

February 19th, Pathology—Splenic anemia (splenic pseudoleukemia), Irving P. Lyon. Leukemia, Charles S. Jewett.

February 26th, Obstetrics—Subjects to be announced, M. A. Crockett; L. G. Hanley.

March 5th, Surgery—Subject to be announced, George E. Brewer, New York City.

March 12th, Medicine—The racial factor in hysteria, Julius Ullman; Hysterial aphonia, George F. Cott. Unusual cases of hysteria, ——————.

March 18th, Ophthalmology—The making and fitting of spectacles and eye-glasses from the optician's standpoint, P. H. Meyer.

March 19th, Pathology—Quarterly meeting of the Academy. The pathology of so-called bone aneurisms, H. R. Gaylord. The principles of disinfection, H. D. Pease.

March 26th, Obstetrics—Subject to be announced, William Warren Potter. Ovarian hernia, Stephen Y. Howell.

April 2d, Surgery—Subject to be announced. Charles L. Scudder, Boston, Mass. Anemia, Edward J. Meyer.

April 9th, Medicine—Tenement house problem, Ernest Wende.

April 15th, Ophthalmology—A point in physiological optics, Lucien Howe.

April 16th, Pathology—The pathology of asthma, George N. Jack, Depew, N.Y. Retro-peritoneal sarcoma, Charles E. Congdon.

April 23d, Obstetrics—Face presentations, John V. Woodruff. Differential diagnosis between diseases of the appendix, gall bladder and right pelvic viscera, A. L. Benedict.

May 7th, Surgery—Subject to be announced, Frank W. Hinkel.

May 14th, Medicine—How are we educating our children? A. W. Bayliss; discussion opened by Prof. Henry P. Emerson.

May 20th, Ophthalmology.—Subject and essayist to be announced.

May 21st, Pathology—Investigations on trichinosis, H. U. Williams. The brachial plexus, Abram T. Kerr.

May 28th, Obstetrics—Excision of the bladder, Matthew D. Mann.

June 4th, Surgery—Subject and essayist to be announced.

June 11th,—Annual meeting of the Academy.

June 17th, Ophthalmology—Subject and essayist to be announced.

June 18th, Pathology—Changes in brain tissue in chronic brain disease, H. G. Matzinger. Remarks on etiology and pathology of epilepsy, with report of cases, Henry P. Frost.

June 25th, Obstetrics—Quarterly meeting of the Academy. Diseases of the newborn, Dewitt H. Sherman. Hemorrhagic diseases of the newborn, Irving M. Snow.

THE Keuka Lake Medical and Surgical Association held its second annual meeting at Grove Springs Hotel, Lake Keuka, August 14 and 15, 1900. The attendance was large and the program elaborate, hence the meeting was enthusiastic. The territory embraced in the jurisdiction of the association includes the counties of Chemung, Yates, Schuyler and Ontario.

The physicians of the Lake Keuka region convened at Grove Springs last year, and that meeting was so successful in its inception and results that it was concluded to continue the meetings. The attendance at this year's association was greater by far than last year and a most decided success from every point of view. In view of that fact, it was deemed advisable to reorganise under a new name. The Keuka Lake Medical and Surgical Association was chosen, but we think it would be still better to name it simply the Keuka Lake Medical Association, the words "and Surgical" being superfluous and tending to make the name cumbersome.

Among the physicans in attendance from Buffalo were Drs. Grover William Wende and Floyd S. Crego.

The regular program was completed [at Wednesday afternoon's session and this was followed by a business meeting, at which were elected officers for the ensuing year as follows:

Henry Flood, of Elmira, president; W. Austin Macy, of Willard State Asylum, vice-president, and W. M. Smith, of Avoca, secretary and treasurer.

THE American Microscopical Society held its twenty-third annual meeting at New York City, June 28, 29 and 30, 1900, and was a great success, both from a scientific and social standpoint.

The society received a most prompt and cordial invitation from the Denver Microscopical Society and from the Denver Academy of Science to hold its next annual meeting in Denver on the occasion of the meeting of the American Association for the Advancement of Science, August 24 to 31, 1901.

The officers elected for the ensuing year are: President, C. H. Eigenmann, Bloomington, Ind.; first vice-president, Charles M.

Vorce, Cleveland, O.; second vice-president, Edward Pennock, Philadelphia, Pa.; elective members of executive committee, C. A. Kofoid, Urbana, Ill.; John Aspinwall, New York, A. G. Field, Des Moines, Iowa.

THE American Electro-therapeutic Association will hold its tenth annual meeting on Tuesday, Wednesday and Thursday, September 25, 26, 27, 1900, at the Academy of Medicine, New York City, under the presidency of Dr. Walter H. White, of Boston. Members of the profession are cordially invited to attend.

THE Rochester Academy of Medicine was organised within the last year on lines similar to those that pertain to the Buffalo organisation. A provisional limited charter has been granted by the regents of the University, which confers the ordinary powers upon nine incorporators, who are its first trustees. Their names are as follows: William S. Ely, Eugene H. Howard, Simon L. Elsner, John O. Roe, Edward B. Angell, Edward W. Mulligan, Richard M. Moore, Charles A. Dewey and Henry T. Williams. The Academy is divided into four sections, each of which holds monthly meetings on Wednesday evenings, excepting in July, August and September, while the Academy holds regular quarterly meetings on the second Wednesday evenings of March, June, September and December. An initiation fee of $20.00 is laid which includes the dues for the first year, the annual dues thereafter being $10.00; nonresident Fellows pay $5.00. The officers for 1900 are:

President, William S. Ely; vice-presidents, Charles A. Dewey, John O. Roe, Simon L. Elsner, Richard M. Moore; secretary, Henry T. Williams; treasurer, Edward B. Angell; board of trustees, William S. Ely, Eugene H. Howard, Simon L. Elsner, Edward B. Angell, John O. Roe, Edward W. Mulligan, Richard M. Moore, Charles A. Dewey, Henry T. Williams; board of councilors, William S. Ely, Charles A. Dewey, John O. Roe, Simon L. Elsner, Richard M. Moore, Henry T. Williams, Edward B. Angell, Eugene H. Howard, Edward W. Mulligan; library committee, John O. Roe, J. Livingston Roseboom, Edward B. Angell. Section I.—Chairman, Charles A. Dewey; secretary, Charles E. Darrow. Section II.—Chairman, John O. Roe; secretary, E. Wood Ruggles. Section III.—Chairman—Simon L. Elsner; secretary, Lewis W. Rose. Section IV.—Chairman, Richard M. Moore; secretary Robert G. Cook.

The Medical Association of Central New York will hold its thirty-third annual meeting Tuesday, October 16, 1900, at Rochester. The officers for the current year are: President, John Gerin, of Auburn; vice-presidents, Lucien Howe, of Buffalo; and A. L. Beahan, of Canandaigua; secretary, Charles A. Vander Beek, of Rochester; and treasurer, S. L. Elsner, of Rochester.

The American Therapeutic Society was organised at Washington, D.C., May 1, 1900 The next meeting will be held at Washington, May 7-9, 1901. Dr. Eli H. Long, of Buffalo, is one of the vice-presidents.

COLLEGE AND HOSPITAL NOTES.

The medical department of the University of Buffalo will open its fifty-fifth regular session on Monday evening, September 24, 1900, when an inaugural address will be delivered. The following day, Tuesday, the lecture course will commence and continue for the next thirty weeks, during which there will be instruction by lectures, recitations, laboratory work and clinics. Full particulars and a catalogue may be obtained by addressing Professor John Parmenter, M. D., secretary of the University, at the college building, 24 High Street, Buffalo, N.Y.

The Albany Medical College Alumni Association offers the Schuyler alumni prize for 1901, established by Dr. Clarkson C. Schuyler, A. M. C., '75. It is a yearly prize of $100 to be awarded at the annual meeting of the Alumni Association, for the best essay written by a graduate of this college on some prescribed subject. The subject for next year is: "The Influence of the Discovery of the Relation of Bacteria to Disease on the Practice of Medicine Exclusive of Surgery."

Competing essays, signed by some assumed name or motto, and accompanied by a sealed envelope superscribed in the same manner and containing within the author's real name and address, are to be sent to Dr. Samuel B. Ward, Albany, of the prize committee, on or before March 1, 1901.

Book Reviews.

A PRACTICAL TREATISE ON SEXUAL DISORDERS OF THE MALE AND FEMALE. New (2d) edition. By ROBERT W. TAYLOR, M. D., Clinical Professor of Venereal Diseases in the College of Physicians and Surgeons, New York. In one 8vo volume of 435 pages, with 91 illustrations and 13 plates in colors and monochrome. Philadelphia and New York: Lea Brothers & Co. [Price, cloth, $3.00 net.]

The second edition of this work which recently appeared is entirely revised. The author has amplified, added to, and, in places, modified the original text. The subject of sexual disorders in women receives marked attention, several entirely new chapters being added. Many new illustrations appear, and a point very valuable to readers, especially those who know Robert Taylor, is the fact that they are original and can be depended upon as representing existing conditions.

The first four chapters are devoted to the anatomy and physiology of the sexual apparatus, physiology of the male sexual function and the nature and composition of the seminal fluid. The parts are carefully illustrated, there being five colored plates, showing the different anatomical structures in situ. The great help this one feature is to the genito-urinary specialist can scarcely be estimated, not to speak of its value to the general practitioner. The next eight chapters are devoted to a class of diseases and deformities that cause more mental suffering than can be estimated, except possibly by those who are called upon to treat these conditions. If general practitioners would take up and make a careful study of the conditions described by Taylor, applying them as advised, that class of parasites that make their living by treating lost manhood, etc., would soon be driven from the field.

In speaking of curvatures of the penis as a factor in producing organic impotence Taylor refers to over-dilatation and deep cutting of the canal for stricture, as causes of many of these conditions. This is a sound opinion and upon which the author, in our view, should have laid more stress.

In dealing with sterility Taylor brings out a fact that is becoming more apparent every day—namely, that unfruitful marriages are not, as was formerly supposed, always due to the wife, but he states, and his observations are quite correct, that one case in six is due to a condition of sterility in the male. Much stress is laid on epididymitis as a cause, and he could have said with truthfulness that this one complication of gonorrhea may be considered the most important cause of male sterility. The author brings out an important point when he emphasises the continued treatment of this condition until all evidences of induration have disappeared.

In referring to chronic posterior urethritis as a cause of sexual weakness and impotence, Taylor, in mentioning the treatment, sounds the key note when he says "the duration of urethritis has an important bearing upon its treatment." There is no doubt but at least 90 per cent. of the gonorrheal inflammations in this locality would fully resolve, provided irritation by sounds, and the like, was postponed until such time as they might become a necessity for aiding nature. The solutions mentioned and in the strengths advised cannot be improved upon, but the reviewer must disagree with their mode of application. There can be no doubt that the daily or even every-other-day passage of a catheter over an inflamed membrane keeps alive such an inflammation. It must be sterilised every time and unless care is used in holding the meatus so as to balloon the canal, the solution does not come in contact with the whole mucous surface. With the syringe illustrated by the author, the solution can be put into the bladder without any pain, at the same time dilating all rugæ. In the author's reference to the treatment of stricture every point is well taken, dilatation being favored in almost all cases; a most just decision. The complication mentioned might be avoided in nearly all, if not in every case, had he advised thorough cleansing of the canal by an antiseptic solution previous to the passage of any instrument.

Prostatic hypertrophy as a cause of sexual weakness receives attention only so far as a work of this kind will permit, but the few lines in reference to treatment are fully equal to some chapters that occupy considerable space in standard works.

The subject of masturbation in the male is most carefully considered. Taylor claims, and his opinion cannot be disputed, that masturbation if not commenced before the organs have fully developed, and the practice be not carried to excess, will not in a mentally sound person produce much if any damage. He might have referred to the reading of quack literature as being one cause of the nervous symptoms seen in most cases. It would have been well to have advocated home explanations by the parents regarding the outcome of the formation of that loathsome practice, together with that of over indulgence, which is as bad, if not worse, than the former.

The female receives attention to the extent of eleven chapters, Taylor most carefully describing practically the same conditions that have been considered in the male. Certainly this is a valuable work, and it must be conceded that his closing words on spermatorrhea state a fact that should apply not only to that trouble, but all troubles of an imaginary sexual nature—namely, that the subjects of noticeable symptoms of the sexual organs where there has been no previous inflammatory trouble, are weak, and the location of this weakness is in the brain. J. H. D.

TRANSACTIONS OF THE AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS. Volume XII. For the Year 1899. Edited by William Warren Potter, M. D., Secretary. Philadelphia: W. J. Dornan, Printer. 1900.

This volume contains the proceedings of the association during its twelfth annual meeting, held at Indianapolis, Ind., September 19-21, 1899, under the presidency of Dr. Edward J. Ill., of Newark, N. J. The president chose for the subject of his address, "The rights of the unborn; the prevention of conception." He presented concisely and ably the most enlightened and conservative view of the perplexing problems comprehended by the title.

One of the prominent features of the meetings of this association is the holding of a session for the presentation of specimens and discussions as to their clinical and pathological significance. These specimens are photographed and reproduced in half-tones in the book. This most excellent method serves to stimulate pathologic research and to lead to the proper interpretation of pathological lesions. It brings into closer relation clinical experience and pathologic facts.

There are thirty-three contributions in the volume, many of which are superbly presented and admirably discussed, while all are of interest and more or less instructive.

We cannot speak of them in detail and do not wish to make invidious distinction, nevertheless, we feel impelled to mention the article of Dr. John W. Ballantyne, of Edinburgh, on "The antenatal factor in gynecology," as a contribution to the general knowledge of a subject that has only a sparse literature.

The memorial address upon the life and character of Lawson Tait, by Charles A. L. Reed, of Cincinnati, which is the final article in the book, is a masterful presentation of the life-history of one of the great lights of modern medicine, who has been a distinctive contributor to gynecological science. Dr. Reed's marvelously eloquent address will be quoted ages hence whenever a model is desired or an exemplar pointed out.

DISEASES OF THE NOSE AND THROAT. By J. PRICE BROWN, M. B, L. R. C. P. E., Member of the College of Physicians and Surgeons of Ontario; Laryngologist to the Toronto Western Hospital; Laryngologist to the Protestant Orphans' Home; Fellow of the American Laryngological, Rhinological and Otological Society; Member of the British Medical Association, the Pan-American Medical Congress, the Canadian Medical Association, the Ontario Medical Association, etc., etc. Illustrated with 159 engravings, including 6 full-page color plates and 9 color-cuts in the text. Pages xvi.—470. Philadelphia: The F. A. Davis Co., Publishers. 1900. [Price, cloth, $3.50.]

This is the first book upon this subject written in Canada, although there are several distinguished teachers and practitioners of laryngology in the Dominion.

The author in his preface tells us that his work is not for the specialist, but for the general practitioner, and while reading the book one cannot fail to appreciate the skill with which he accomplishes his task.

The metric system is adopted throughout the work, an example which might be more widely followed with great propriety. The whole book bears an individual stamp, although the author has followed the classification of diseases given in Bosworth's book on diseases of the nose and throat.

The articles on some diseases are almost exhaustive, too much so perhaps for a work intended for the general practitioner. Among such may be mentioned those on nasal polypi and diseases of the accessory sinuses of the nose. Three exhaustive articles have been written upon subjects which have received special study during the last ten or fifteen years. On the other hand, diseases which were more exhaustively discussed by the older laryngologists, scarcely receive the attention which they deserve.

In some places the author gives exhaustive accounts of recent theories and fails to mention well-known facts of great clinical importance; for example, in the article on paralysis of the larynx he devotes nearly two pages to an account of recent researches in regard to the functions of the adductors and abductors of the cords, and although he mentions that aneurism of the arch of the aorta is a cause of paralysis of the recurrent laryngeal nerve, he fails to tell his readers that the paralysis is, in this case, on the left side of the larynx, because the left recurrent nerve passes around the arch of the aorta and returns from this position to the pharynx—an anatomical fact which they may have forgotten, since they were not reminded of it in the author's description of the anatomy of the larynx. This is a fact that is often of great assistance to the clinician who habitually uses the laryngoscope.

The author fails to lay stress upon the time of life at which congenital syphilis generally occurs, although he incidentally—under the diagnosis of congenital syphilis of the nose writes: "The diagnosis from ordinary purulent rhinitis of childhood should not be difficult, as syphilitic rhinitis will be manifest during early infancy." He fails likewise to mention anywhere in the work syphilis heredetaria tardu, which frequently manifests itself as nasal and pharyngeal lesions. The application of cold externally and the internal or hypodermic administration of pilocarpine are not recommended in the treatment of acute edematous laryngitis.

No mention is made of Asch's and other similar operations on the septum in his description of the treatment of deformities of the nasal septum. It is true such operations can only be performed by the skilled operator, yet all who read systematic works on diseases of the nose should have presented to them a description of these operations with an opinion of the author as to their utility.

The reviewer does not advise the use of menthol, as has the author in the treatment of hay-fever, for it has in his hands proven very irritating to the nasal mucous membrane. One can scarcely understand why the author has omitted to describe in a book on diseases of the nose and throat such a disease as diphtheria, and the same might be said of diseases of the frontal sinus, for in this part of the country, at least, patients with this condition, unless the trouble is so far advanced as to produce exophthalmia, are more apt to consult the rhinologist than the oculist.

The work will compare favorably with the books written upon this subject during the last two or three years in this country and will prove a very useful treatise, we have no doubt, to the class of practitioners in Canada, for which it has been specially written. We have pointed out what seems to us defects, but notwithstanding all these, it is quite as free from sins of omission and commission as the average work of similar character, and is destined to occupy a distinctive place among the recent contributions to the literature of diseases of the upper-air tract. W. S. R.

VENEREAL DISEASES, THEIR COMPLICATIONS AND SEQUELÆ. By EDWARD L. KEYES, A. M., M. D., Late Professor of Dermatology and Genito-urinary Surgery in the Bellevue Hospital Medical College; and CHARLES H. CHETWOOD, M. D., Professor of Genito-urinary Surgery in the New York Polyclinic College and Hospital. One volume 8vo. New York: William Wood & Co. 1900. [Price, extra muslin, $2.75 net.]

The field of genito-urinary literature appears to be fairly well supplied now, with this volume following so closely on the appearance of Lydston's work, on the same general subject.

The original of the volume under consideration was written nearly twenty years ago by Dr. Keyes, and it was then accepted as the authority. The present issue is a revision. That portion of Dr. Keyes's work relating to syphilis has been changed little if any. In fact, his teachings in the early days regarding the management of syphilis have been adhered to and there have been few additions made to his systematic treatment.

One needs little more than Dr. Keyes's teachings on syphilis to get pretty thoroughly over the ground and obtain a fairly good working idea of that phase of the trouble. Much of his writings on other branches of the general subject have of necessity, by reason of the advancement in treatment and diagnosis, been gone over, and to that extent improved.

On opening the book one senses a feeling of satisfaction for it starts off with the bacteriology of acute specific urethritis. Here, the text describes most minutely and most graphically the appearance and growth of the gonococcus of Neisser, and there is laid down in the minutest manner the process of staining for microscopical determination of the presence of the organism. The illustrating here is particularly good, and admirably true. Colored plates show the various steps taken with the Gram stain, and everything is made plain, very plain, and instructive. The one criticism, which can honestly be made of the whole work, crops out in the following section, that devoted to the general subject of urethritis. Here, the construction is somewhat hazy at times, and in spots the meaning is not quite clear; yet, while this is unfortunate, it cannot be called a fault for it in no wise mars the consideration of the whole subject and its very comprehensive summing up. In those chapters devoted to circumcision one finds some very excellent instruction. The whole subject is considered in detail and the various steps of the operation and the after-treatment are made remarkably clear. Should a person who had never done a circumcision carefully study the text and illustrations, it is safe to say that were he possessed of ordinary intelligence and receptive faculties, he would be able to perform a very creditable bit of work according to the Keyes-Chetwood standard, which is a good one. Throughout instruments mentioned in the text are illustrated clearly; that is, there are no stock wood cuts, which make so many medical volumes look like cheap catalogues. As a whole, the book is a very good, every-day aid to genito-urinary work, as it should be done these modern days. Were I a captious critic, I might take exception to the lack of vehemence regarding urethral sepsis, but that, while good as a general proposition, is largely a matter of opinion. Only works should be criticised. Opinions should be subject for argument—friendy argument.

The best of Dr. Keyes's work has been retained in its original form. These portions in which the progress of medicine has made changes necessary have been brought up to date by Dr. Chetwood with wisdom, care and common sense. N. W. W.

THE REFRACTION OF THE EYE. A Manual for Students. By GUSTAVUS HARTRIDGE, F. R. C. S., Senior Surgeon to the Royal Westminster Ophthalmic Hospital; Ophthalmic Surgeon and Lecturer on Ophthalmic Surgery to the Westminster Hospital; Ophthalmic Surgeon to St. Bartholomew's Hospital, Chatham; Consulting Ophthalmic Surgeon to St. George's Dispensary, Hanover Square, etc. With 105 illustrations. Tenth edition. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1900.

Hartridge's refraction of the eye has now reached its tenth edition, the first having being issued in 1884. As an elementary treatise on refraction it has deserved the favor it has received, both in England and America. It is clear and concise, and the author has kept abreast of the times. In this edition he has, as he says in the preface, carefully revised every page and made alterations in accordance with our increasing knowledge of the subject. The original plan of the work is preserved, which not only includes the consideration of errors of refraction, but strabismus and asthenopia are also discussed in their relations to refraction, and a chapter is added on spectacles. The author is conservative in his views, but he is not antiquated. It is a good work for a student in refraction to begin with. A. A. H.

ELEMENTS OF CLINICAL BACTERIOLOGY FOR PHYSICIANS AND STUDENTS. By DR. ERNST LEVY, Professor in the University of Strasburg, i. E., and DR. FELIX KLEMPERER, Privatdocent in the University of Strasburg, i. E. Second enlarged and revised edition. Authorised translation by AUGUSTUS A. ESHNER, M. D., Professor of Clinical Medicine in the Philadelphia Polyclinic, etc. Philadelphia: W. B. Saunders 1900. [Price, $2.50.]

The authors have attempted to group the results of bacteriologic investigation from the clinical point of view and, judging from the rapid exhaustion of the first edition, their efforts have been highly successful. The size of this edition is considerably increased over that of the first, owing to the results of recent investigations which have been incorporated in this one. Chapters have been added on the plague and botulism and those on immunity, diphtheria, typhoid fever, actinomycosis, examination of air and water, and others have been radically revised. The work is divided into four parts. Part I. treating of the morphology and biology of bacteria, infection, immunity and methods of culture and of examination. Part II. is devoted to inflammation and suppuration. Under this part are considered the different forms of pyogenic cocci, as the streptococci, staphylococci, pneumococci and others. The diseases occasioned by these germs are considered in this chapter as erysipelas, pleuritis, endo-and pericarditis, nephritis, abscess of the liver and the like.

Under Part III. are considered the specific diseases of bacterial origin such as typhoid fever, cholera, tuberculosis, glanders, leprosy and the like. The chapter on botulism or meat poisoning, which has been added in this second edition is a comprehensive review of this important subject. It takes up the symptoms of meat and sausage poisoning, the morphology of the bacillus botulism, as discovered by Van Ermengene, the cultural peculiarities and pathogenic properties.

Part IV. takes up the mycoses. The appendix is devoted mainly to hygiene—such as the bacteriologic examination of air, soil and water, and disinfection. Under the latter head are considered disinfecting agents—disinfection of the hands, mucous membranes, instruments and dressings, feces, cesspools, bathtubs, urine, sputum, beds, clothing, articles of food, sick-room, shops, vehicles and railway cars.

The translator has done his work admirably and has added explanatory foot-notes throughout the book. The illustrations are profuse and attractively executed. W. C. K.

ON DIABETES MELLITUS AND GLYCOSURIA. By EMIL KLEEN, Ph. D., M. D' Octavo, 313 pages. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1900. [Price, cloth, $2.50 net.]

The syndrome, diabetes mellitus, of which the chief and most constant symptom is glycosuria, has long been the subject of study by pathologists and clinicians. Not yet, however, has a satisfactory conclusion been reached as to its causes, true pathology, or best treatment. This contribution of Kleen will aid very materially in the solution of many doubtful points connected with diabetes.

The author has had exceptional opportunities to pursue his investigations and a unique experience in dealing with the disease. His residence at Carlsbad has served to develop and mature both his studies and experience. It is, so to speak, a storm center of diabetes. Being a disease of the wealthy and sedentary classes, diabetics in great numbers frequent the German spas and especially Carlsbad. The habitually luxurious liver is especially prone to the disease; whereas, the working man is astonishingly exempt from it.

Slight glycosurias play an interesting and important part in the economy, and bear an intimate relation to other maladies. True, so-called functional glycosuria may be comparatively unimportant, per se, but it may serve to explain obscure symptoms and lead to accuracy in diagnosticating other and even graver conditions.

Kleen deals with the whole subject with intelligence, points out its direct and remote influence on the economy, discusses symptoms and complications of mild and severe forms of the disease with clearness, and discourses upon treatment in an intelligent manner. The mortality among children of diabetic parents is high, hence the importance of preventing proposed marriages between confirmed diabetics or even between a diabetic on the one side and a healthful partner on the other. Prophylactic measures against diabetes of rigid nature are often needed and Kleen points out the fact as well as the method of carrying out the needed measures.

In the treatment Kleen places less reliance upon drugs than upon hygiene and dietetics. He, however, does not undervalue well-directed drug treatment as an adjunct to the other measures recommended. He makes practical application of the most approved medicines with a scientific discretion.

This is a treatise that will prove helpful to the general practitioner who will appreciate its value as a clinical guide. It deserves the approbation of the profession of medicine.

Diseases of the Eye. By Edward Nettleship, F. R. C. S., Ophthalmic Surgeon at St. Thomas' Hospital, London; Surgeon to the Royal London Ophthalmic Hospital, etc. New (6th) American from the sixth English edition, thoroughly revised by William Campbell Posey, M. D. With a supplement on the detection of color blindness by William Thomson, M. D., Professor of Ophthalmology in the Jefferson Medical College, Philadelphia. In one 12mo volume of 562 pages, with 192 illustrations. Selections from Snellen's test types and formulæ and 5 colored plates. Philadelphia and New York: Lea Brothers & Co. [Price, cloth, $2.25 net.]

Only a short time has elapsed since the American publishers issued the fifth, from the sixth English edition of this standard manual of Nettleship. The rapid exhaustion of that edition has demanded a sixth American, which is now before us. This edition differs from all others in being revised and edited by an American ophthalmologist, Dr. Posey, of Philadelphia. A few changes and additions have been made by him which very materially enhance its value from the American standpoint of practice, notably in the section on refraction. He has also given the latest views regarding the bacteriological origin of several forms of conjunctivitis, and has described several new forms of ocular disease.

Dr. Thomson has also availed himself of this opportunity to revise his chapter on the examination of railroad employees and has made some useful additions.

This edition of "Nettleship" therefore, while preserving all the compactness and comprehensiveness of former editions, has additional matter which will assure its continued popularity in this country.

A. A. H.

Normal Histology. By Edward K. Dunham, M. D., Professor of General Pathology, Bacteriology and Hygiene in the University and Bellevue Hospital Medical College, New York. New (2d) edition. In one very handsome 8vo volume of 319 pages, with 244 illustrations. Philadelphia and New York: Lea Brothers & Co., Publishers. 1900. [Price, cloth, $2.50 net.]

The first edition of Dunham's histology was reviewed in the April, 1899, number of this journal, page 717, and the opinion expressed that it would prove highly successful, because the author covered the ground so thoroughly and concisely and stamped his personality on every page of the book. In less than two years a new edition is called for, which gives the author opportunity for making several changes, most important of which is the separating of the work into two volumes, one on normal histology, and the other on pathological histology.

In that on normal histology, which is fresh from the press, he has added such material as has been developed in the brief period since the original publication of his book, and he has likewise appended his concise and complete chapter on technique, so that the book answers every demand of student or physician as a text or laboratory manual. The companion volume on pathological histology is actively preparing. For the advantage of those students whose professors cover both normal and pathological histology in their courses, the original book presenting the whole cognate subject in a single pair of covers will continue to be published.

The volume on normal histology has been rearranged and enlarged so as to cover the field somewhat more in detail than in the first edition and the popularity gained by the former volume cannot fail but fall to the new volume.

Professor Dunham has shown much tact and good judgment in the selection of illustrations as all are beautiful in execution and clear in detail. The volume on pathological histology will be anxiously expected. W. C. K.

SURGICAL PATHOLOGY AND THERAPEUTICS. By JOHN COLLINS WARREN, M. D., LL. D., Professor of Surgery in Harvard University; Surgeon to the Massachusetts General Hospital. Illustrated. Second edition, with an appendix, containing an enumeration of the Scientific Aids to Surgical Diagnosis, together with a series of Sections on Regional Bacteriology. Philadelphia: W. B. Saunders. 1900.

The title page and preface of the second edition of Warren's Surgical pathology and therapeutics draws attention to the appendix in which important changes are included, replacing the old appendix and the chapter on antiseptic surgery.

The excellence of the first edition, the exhausting of the supply, thus putting the work out of print, justify the second edition. The appendix is in the main a review of magazine articles with so little of positive information that it should not be offered as a justification for a second edition of the work. The author states some conclusions of value in the brief discussion he devotes to blood examination. In the paragraphs on the urine, the feces, immediate microscopical examination of sections of tumor during operations, and the Röntgen rays, a most brief and guarded summing up of recent pathological work is made. The chief value of the appendix is to be found in the deductions drawn from bacteriological work done on the bacteria of the skin and orifices of the body. The application of our knowledge in these fields to wound treatment and healing deserves commendation.

A clearer and more positive statement of the difference between hyperemia or non-infective, inflammation and inflammation as a process due to infection should have been made in the light of what has been done in the last few years in this field. To leave the old confusing ideas of the first edition on this subject is inexcusable.

The work is chiefly valuable to the student and practitioner interested in the newer pathology, because it so well expresses the thought of men of the school of five years ago. E. A. S.

THE ANATOMY OF THE BRAIN. A Text-book for Medical Students. By RICHARD H. WHITEHEAD, M. D., Professor of Anatomy in the University of North Carolina. Illustrated with Forty-one Engravings. Pages, v—96. The F. A. Davis Co., Publishers, 1914–16 Cherry Street, Philadelphia, Pa. [Price, extra vellum cloth, $1.00 net.]

The author does not claim that this little book shall take the place of the recognised standard works on the brain and nervous system, but it is his aim to furnish medical students with a clear, accurate and concise account of the anatomy of the brain, to be used as a guide in the study of this most important organ. It is not to be expected that in a work of ninety-six pages the subject of brain anatomy could be treated without leaving out many of the minor details, the points over which controversy still exists, and the minute anatomy or histology, and the author wisely draws attention to these omissions in the preface.

The author describes the intricate details of brain anatomy clearly and lucidly, and although briefly, yet sufficiently to give a good idea of the mechanism of the human brain.

On the whole, the book gives promise of becoming an excellent treatise with succeeding editions, and the hope is expressed that the author may become imbued with the prevalent idea of expansion and take up some of the minor and controversial points, and develop them into a treatise sufficiently advanced for the general practitioner and specialist. W. C. K.

ESSENTIALS OF DIAGNOSIS, arranged in the form of Questions and Answers. Prepared especially for students of medicine. By SOLOMON SOLIS-COHEN, M. D., Professor of Clinical Medicine and Therapeutics in the Philadelphia Polyclinic, etc., and AUGUSTUS A. ESHNER, M. D., Professor of Clinical Medicine in the Philadelphia Polyclinic, etc. Illustrated. Second edition revised and enlarged. Philadelphia: W. B. Saunders. 1900. [Price, $1.00.

No introduction is necessary to the excellent series of medical works known from Maine to California as Saunders's Question Compends. Every student in medicine for the past ten years has in some way or other gleaned some knowledge, some fact from these handy little volumes, which say so much in such a limited space and which lasts after it has been said. The profession also looks to this series when hurriedly in search of important information and generally finds exactly what is sought after. The volume on medical diagnosis by the two distinguished authors is up to the high standard of the series and in this second edition they have been able to enlarge, rearrange and revise, and so make this volume as complete and accurate as the present state of scientific medicine will permit.

The binding, paper and print conforms with other numbers of this series. W. C. K.

MANUEL COMPLET DE GYNÉCOLOGIE MÉDICALE ET CHIRURGICALE. Par A. LUTAUD, Professeur de Gynécologie, Médecin Adjoint de Saint Legare, etc., etc. Nouvelle édition entièrement refondue. Contenant la technique opératoire complèt, pp. 712, et 607 figures dans le texte. Paris; A. Maloine, Editeur, 23–25 rue de l'École de Médecine. 1900. From Mariani & Co., New York.

This well known author presents to the profession a new edition of a treatise that has taken an established place in the literature of gynecology. It gives in minute detail all the minor gynecological procedures as well as all major operations falling within the domain of gynecological surgery.

Professor Lutaud is to be classed as a practical gynecologist, who is not devoted to the exploitation of any particular fad, but gives the best instruction on all accepted measures that have in view ultimate cure of the patient.

The illustrations are to be commended with special insistence; they are so clear, so well drawn, and withal so copious, that a study of them will enable even a novice to do many operations well that he may not have witnessed. The work before us is in the original French, hence possesses an additional charm to students of that language.

BOOKS RECEIVED.

Practical Urinalysis and Urinary Diagnosis. A Manual for the Use of Physicians, Surgeons and Students. By Charles W. Purdy, LL.D, M. D., Queens University, Fellow of the Royal College of Physicians and Surgeons, Kingston, Canada; Professor of Clinical Medicine at the Chicago Post-Graduate Medical School; Author of "Bright's Disease and Allied Affections of the Kidneys"; also of "Diabetes: Its Causes, Symptoms and Treatment." Fifth revised and enlarged edition. With numerous illustrations, including photo-engravings, colored plates, and tables for estimating total solids from specific gravity, chlorides, phosphates, sulphates, albumin, reaction of proteids, sugar, etc., etc., in urine. 6 x 9 inches. Pages xvi.—406. Philadelphia: F. A. Davis Company, Publishers, 1914–16 Cherry Street. [Price, extra cloth, $3.00 net.]

Manual of Pathology, Including Bacteriology, the Technic of Postmortems, and Methods of Pathologic Research. By W. M. Late Coplin, M. D., Professor of Pathology and Bacteriology, Jefferson Medical College, Philadelphia; Pathologist to Jefferson Medical College Hospital and to the Philadelphia (Blockley) Hospital; Bacteriologist to the Pennsylvania State Board of Health. Third edition, revised and enlarged. 330 illustrations and 7 colored plates. Octavo, 846 pages. Philadelphia: P. Blakiston's Son & Co. [Price, $3.50 net]

International Clinics. A Quarterly of Clinical Lectures and Especially Prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Pediatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose and Throat, etc. Edited by Henry W. Cattell, A. M., M. D., Director of the Ayer Clinical Laboratory of the Pennsylvania Hospital. With the collaboration of John Ashhurst, Jr., M. D., LL. D., and Charles H. Reed, M. D., of Philadelphia; James T. Whittaker, M. D, LL. D., of Cincinnati. Vol. II. Tenth Series, 1900. Philadelphia: J. B. Lippincott Company. 1900.

Clinical Examination of the Urine and Urinary Diagnosis. A Clinical Guide for the Use of Practitioners and Students of Medicine and Surgery. By J. Bergen Ogden, M D., Instructor in Chemistry, Harvard University Medical School; Assistant in Clinical Pathology, Boston City Hospital, etc. Octavo, pp. 416. Illustrated. Philadelphia: W. B. Saunders & Co. 1900. [Price, $3.00 net.]

Atlas and Epitome of Diseases Caused by Accidents. By Dr. Ed. Golebiewski, of Berlin. Authorised translation from the German, with editorial notes and additions by Pearce Bailey, M. D., Consulting Neurologist to St. Luke's Hospital and the Orthopedic Hospital, New York, and to St. John's Hospital, Yonkers; Assistant in Neurology, Columbia University, etc. Forty colored plates and 143 illustrations in black. Philadelphia: W. B. Saunders & Co. 1900. [Price, $4.00 net.]

Atlas and Epitome of Gynecology. By Dr. Oscar Schaeffer, Privatdocent of Obstetrics and Gynecology in the University of Heidelberg. Authorised translation from the second revised and enlarged German edition. Edited by Richard C. Norris, A. M., M. D., Surgeon-in-charge Preston Retreat, Philadelphia; Gynecologist to the Methodist Episcopal Hospital and to the Philadelphia Hospital, etc. With 207 colored illustrations on 90 plates, and 62 illustrations in the text. Philadelphia: W. B. Saunders & Co. 1900. [Price, $3.00 net.]

A Manual of Personal Hygiene. Edited by Walter L. Pyle, A. M., M. D., Assistant Surgeon to Wills Eye and Ear Hospital, Philadelphia; Fellow of the American Academy of Medicine, etc. 337 pages; illustrated. Philadelphia: W. B. Saunders & Co 1900. [Price, $1.50 net.]

Lessons on the Anatomy, Physiology and Hygiene of Infancy and Childhood. Consisting of Extracts from Lectures given at Rush Medical College, by Alfred C. Cotton, A. M., M. D., Professor of Diseases of Children; Accoucheur and Physician for Diseases of Children, Presbyterian Hospital. 100 illustrations. Chicago: Chicago Medical Book Co. [Price, cloth, $1.50 net.]

Transactions of the Southern Surgical and Gynecological Association, Volume XII. Twelfth session, held at New Orleans, La., December 5, 6 and 7. 1899. W. E. B. Davis, M. D., Secretary. Philadelphia: Wm. J. Dornan, Printer. 1900.

LITERARY NOTES.

The Maltine Company, of Brooklyn, recently published a little book entitled Recipes for Infant Food. It contains a preface giving hints on the subject of infant feeding and each sheet, perforated to be easily detached, presents condensed and simple directions for preparing modified milk food with a blank space left for such special instructions as the physician may choose to give in each particular case. On the reverse more extended general directions are printed for the use of the same food. The book is bound in morocco and is of a size to be carried conveniently in the vest pocket. It will be furnished by the Maltine Company on application.

Listerine is the title of a summer pamphlet recently issued by the Lambert Pharmacal Company, of St. Louis. It deals with the summer diseases of infancy and childhood and contains a number of articles written by prominent members of the medical profession that have been contributed to different medical journals. These have been grouped, the whole forming a useful monograph that will be sent to any physician upon application to the publishers.

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THE RELATION OF THE SPECIFIC GRAVITY OF THE BLOOD TO ITS PERCENTAGE OF HEMOGLOBIN.

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SINCE the publication of our paper in the *Medical News* of December, 1895,[1] we have added a number of new cases to our list of observations. In addition to these, we have included in the present paper much of the description of methods given in our former paper, together with the results of our first observations.

For the determination of the hemoglobin in our first series we used v. Fleischl's hemometer and Gowers's hemoglobinometer. We made no count of the blood corpuscles, in comparison, but it has been found by Jones, Hammerschlag, Schmaltz and others, that the specific gravity corresponds more closely with the amount of hemoglobin than with the number of red blood-corpuscles.

For determining the specific gravity of the blood, a variety of methods have been used. A good method, but one which takes considerable time, is that with the pycnometer. This, as used by Schmaltz, is a capillary tube of 0.1 cc.m capacity, which is first weighed empty, then when filled with water, and, finally, when filled with blood. The weight of the tube is subtracted and the specific gravity calculated from the weight of the blood as compared with that of the water.

Fano, in 1882, used a method which depends upon the principle that a body when immersed in a fluid will float indifferently in that fluid when the specific gravities of the two are the same. The fluid used, was a solution of gum in water. To make this heavier, he added a denser gum solution. To make it lighter he added water. Blood was introduced into this and the liquid made to correspond in specific gravity to that of the blood. The specific gravity of the liquid was then determined and thus at the same time that of the blood.

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[1] Busch and Kerr: "The Relation Between the Specific Gravity of the Blood and its Hemoglobin Percentage," *Medical News*, December 21, 1895."

Roy, in 1884, devised a method applying this same principle. He used solutions of salt or other suitable substances ranging in specific gravity from 1.035 to 1.075. For making the test he used a modified hypodermic syringe. This had a small steel tube prolonged inward from the tip so as to be seen through the glass sides of the barrel. The syringe was filled with a salt solution and a drop of blood drawn into it. As it emerged from the steel tube into the solution he noted whether it rose or sank. If it sank, a new solution of higher specific gravity was chosen; if it rose, one of lower specific gravity was taken. Finally, one was obtained in which the blood neither rose nor sank, or two were found in one of which it rose and in the other sank. In the latter case the specific gravity of the blood was between the two.

Roy's method as modified by Jones, is as follows: The apparatus consists of from 20 to 25 one-ounce glass bottles filled with standard solution of glycerin and water, differing one from the other by 0.001 specific gravity and ranging from 1.027 to 1.075; a number of fine glass pipettes drawn out to a point and bent at right angles near the tip; a cylindrical glass jar of about one-dram capacity; and a number of clean suture-needles. By means of the pipette the blood is introduced into the one-dram jar filled with one of the standard solutions chosen by guess from the appearance of the patient. It is then blown out gently, being given an impetus in a horizontal direction owing to the bent tip of the pipette. If it rises or sinks other solutions are chosen, as in Roy's method.

Landois used solutions of sodium sulphate ranging between 1.050 and 1.070.

Siegel has adopted a device whereby the frequent standardisation with the Jones-Roy method is obviated. He covers the surface of his standard solutions with a layer of olive oil, introducing the blood through this by means of a glass-tube covered by a rubber cap.

In our determinations we have used Hammerschlag's method. The necessary apparatus consists of a urinometer jar, a urinometer, a pipette of small caliber, a glass rod, some fine steel pens, a bottle of chloroform, one of benzol, and a mixture of the two. The finger, after being washed with bichloride and alcohol, is punctured. A good sized drop of blood is introduced into the chloroform-benzol mixture. If the drop sinks the mixture must be made heavier by adding chloroform. If it rises, the mixture is too heavy and must be made lighter by adding benzol.

It is desirable not to divide the drop of blood into several, but on the other hand, care must be taken to get the chloroform and benzol thoroughly mixed by stiring with the glass rod. In order to obtain this end it is better, when the liquid is too heavy, to add an excess of benzol and then obtain the required density by adding chloroform, slowly and carefully until the drop of blood floats indifferently in the mixture. When this occurs, the drop of blood is of the same specific gravity as the mixture, and by determining that of the mixture with a urinometer, we have also determined that of the blood.

We have found it most convenient to obtain the blood from the middle finger of the left hand, making the puncture to the side of the tip on the palmer surface. For this purpose, we have used an ordinary sharp-pointed steel pen, with one nib broken off. The pen was sterilised by heat and a new one used for every test. The blood was drawn up into a pipette of fine caliber, which was introduced into the middle of the chloroform-benzol mixture and nearly all of the blood gently blown out. We were careful, however, not to blow all of the blood out, but to leave a little in the tip of the pipette, shaking off the adhering drop. In this way the error of mixing air with the blood was avoided.

Ziegelroth[3] claims it is better to obtain the blood from the lobe of the ear, since it is nearer the density of the blood in general.

The same chloroform-benzol mixture may be used repeatedly, if filtered after each test. The urinometer jar must be scrupulously clean; otherwise some fine particles of dust might adhere to the drop of blood and cause an error.

It is also imperative to take the reading as soon as possible after a satisfactory mixture is obtained; since there is considerable danger especially in a warm room of error through vaporisation of the volatile fluid. Besides this, the globule of blood, after a little time appears to shrink and change its shape.

The hemoglobinometer of Gowers is usually manufactured with but one colored tube which is for use with daylight only. There is another form in which there are two tubes, one for use with daylight and the other with artificial light. The one we have employed is of the former kind. In making the comparison with it, one must hold the instrument against a white background, opposite the source of light, or as recommended by Landois, between the eye and the light.

In the use of v. Fleischl's hemometer, artificial light is necessary, and the test must be made in a room from which daylight is excluded. We have for the sake of convenience adapted a simple device, allowing us to carry our dark room with us. A piece of card-board is cut so as to fit over the top of the canvas traveling bag in which we carry our instruments. The hemometer is placed in one end of the case, and a small lamp in the other. A hole is cut in the card board to give passage to the lamp chimney. Another small hole is cut so as to be directly over the well of the instrument. At the side of this hole, a window, closed by a card-board flap, is cut, for the introduction of the hand, in order to move the wedge of the instrument.

The specific gravity in health has been differently given by different observers.

MALES.		FEMALES.	
Bennett	1.055–59	Perrier	1,051-55
Perrier	1.056–59	Davy	1,045–56
Frenn	1.062	Nasse	1 055-55
Davy	1.052–60	Becqurel and Rodier	1,054-60
Nasse	1.055–59	Schmidt	1,050
Becqurel and Rodier	1.058–60	Quincke	1,058–60
Muschenbroeck	1.054	Jones (about)	1,055
Denis	1 059	Schmaltz	1,056
Schmidt	1.060	Becker	1,057-56
Loyd Jones	1.058	Landois	1,057–55
Schmaltz	1.059		
Becker	1.054–60		
Landois	1.056–50		

Hammerschlag found the specific gravity of healthy males—between the age of 20 and 40 to vary from 1.057 to 1.625 and in females from 1.0535 to 1.061.

In the tropics, the average for normal adults, according to Glogner, is 1053.6, and according to Eijkman, 1.057.4.

The average specific gravity of the blood in the newborn is 1.060; for the two to four months old child it is 1057; for the twelve months old child it is 1050; and from the second to the tenth year it is 1052. Monti[24].

Jones states that venous blood is denser than arterial. Sherrington and Copeman found almost no difference in density between venous and arterial blood. In passive congestion, as in a ligatured finger, they agree that there is an immediate rise in specific gravity. This rise vanishes immediately upon the disappearance of the congestion. A characteristic property of the blood is to keep its specific gravity constant. Thus, after drinking large amounts of fluid, the change in specific gravity disappears in from one-half to one hour. Sherrington and Copeman found that after injecting large quantities of salt solution into the veins of rabbits, the specific gravity of the blood returned to the normal in a very short time. It was discovered by Hoch and Schlesinger that a marked change in the specific gravity of the blood as a whole might take place without affecting that of the serum. Therefore it appears that, usually, the principal factors in a change of specific gravity of the blood from the normal are the cellular constituents.

According to Ziegelroth[34], the specific gravity of the blood and of the body as a whole are nearly the same; that of the former being on the average, 1.057 and of the latter, 1.055. The specific gravity of the blood is much more stable than that of the body, as a whole. Copious sweating, he found, had no influence on the specific gravity of the blood.

Of the solid constituents of the blood, in man, the hemoglobin constitutes about 60 per cent. (Hoppe-Seyler). In females it is somewhat less. This being the case, variations in the percentage of hemoglobin must immediately affect the specific gravity of the blood. Hammerschlag maintains that it is therefore possible to determine from the specific gravity, accurately enough for clinical purposes, the hemoglobin percentage for a given sample of blood and has formulated the following table of specific gravities with hemoglobin equivalents.

Specific Gravity.	Hemoglobin, Per cent.	Specific Gravity.	Hemoglobin. Per cent.
1.033–1.035	25–30	1.048–1.050	55-65
1.035–1 038	30–35	1.050–1.053	65-70
1.038–1.040	35–40	1.053–1.055	70–75
1.040–1.045	40–45	1.055–1.057	75–85
1.045–1.048	45–55	1.057–1.060	85–95

According to Hammerschlag, this table holds best for cases of anemia, including chlorosis, tuberculosis and malignant tumors. But in interstitial nephritis, the specific gravity is relatively lower than the hemoglobin. In circulatory disturbances, even when edema is present, the specific gravity is generally normal. In fever, it is relatively lower than the hemoglobin, rising after the fall of the fever. According to Monti[24], a normal specific gravity occurred with a diminution of hemoglobin in chlorosis, mild anemia, heart lesions with anemia and in tuberculosis with evening temperature; a higher specific gravity and normal hemoglobin in developing acute fevers; a high specific gravity and diminished hemoglobin in acute and chronic diseases, of long duration; a lower specific gravity and normal hemoglobin in acute nephritis with dropsy; a low specific gravity and lower hemoglobin per cent. in leukemia and pernicious anemia; a low specific gravity and a much lower hemoglobin percentage in severe anemias and chlorosis.

Out of the 100 consecutive cases taken for comparison of the three methods (v. Fleischl, Gowers and specific gravity) in our series of 1895, the amount of hemoglobin estimated from the specific gravity and as determined by the Fleischl method differed by less than 5 per cent. in 24 cases; between 5 per cent. and 10 per cent. in 24 cases: between 10 per cent. and 20 per cent. in 26 cases; and more than 20 per cent. in 26 cases. The specific gravity method ran below the Fleischl in but 15 cases and in 5 of these less than 5 per cent. Therefore the difference observed usually showed the readings higher by the specific gravity method than by the Fleischl instrument.

In the same cases the readings of Gowers's apparatus differed by less than 5 per cent from Fleischl's in 36 cases; between 5 per cent. and 10 per cent. in 21 cases; between 10 per cent. and 20 per cent. in 33 cases; and by more than 20 per cent. in 10 cases. As a general rule they were higher than with Fleischl's, but not quite as high as those estimated from the specific gravity. Comparing the percentage obtained from the specific gravity with the Gowers's readings, in 33 cases there was less than 5 per cent. difference; in 31 cases the difference was between 5 per cent. and 10 per cent.; in 26 cases between 10 per cent. and 20 per cent.; and more than 20 per cent. in 10 cases.

From the foregoing comparison, it appears that in approximately one-half of our cases the hemoglobin as determined from the specific gravity corresponded quite well with the hemoglobin as determined by the Fleischl hemometer; that this correspondence was fair between the specific-gravity determinations and the Gowers determinations in more than one-half of our cases; that there was a somewhat closer correspondence between the determinations from the specific gravity and the Gowers than there was between the Gowers and Fleischl instruments; that the Fleischl instrument gave relatively lower readings.

The differences in the readings of the three methods may be due: (1) to errors in the specific gravity method; (2) to the inaccuracy of the table giving the hemoglobin equivalent for the specific gravity; (3) to the errors of the v. Fleischl and Gowers instruments.

We are convinced that both v. Fleischl's and Gowers's instruments, particularly the latter, are liable to err to a considerable degree.

Osler says that the error in the Fleischl instrument may not be more than 2 per cent. in blood which is nearly normal, but he cites Neubert and Letzius as having shown that in a much impoverished blood the error may be as high as 20 per cent. In using two Fleischl instruments in comparison in the same cases, we have generally found a difference in reading between the two. In 30 per cent. of these comparisons the difference was as much as 10 per cent. We have also found that in about one-fifth of our cases we disagree in our readings of the same instrument; 40 per cent. of these differences were more than 5 per cent.

We feel some hesitancy in stating that in consecutive tests, made with the same Fleischl instrument, in the same cases, within a few minutes, we have found differences in readings of as much as 10 per cent. This occurred to us after having used the instrument almost daily for nearly a year, and after having used it many hundred times. Such errors can only be explained by acknowledging inaccuracy in technic, but a method so easily liable to such serious errors could hardly be relied upon for more precise results in the hurry of ordinary clinical work.

In the same series of consecutive tests, the specific gravity and the hemoglobin percentage as determined by it, varied to an insignificant degree. The hemoglobin percentages, as determined by Gowers's instrument, in some of the tests, varied as much as 10 per cent. In our experience with the Gowers instrument, we have found it very unsatisfactory. It is often quite impossible to get the tint of the diluted blood to correspond with that of the standard 1 per cent. solution. Even when this is attained, a difference in shade may be produced by looking at the instrument somewhat from the side instead of from straight in front, by holding the paper for reflection farther away from or nearer the instrument, by holding the instrument between the eye and the window, or by moving farther away from the window. In the last case, in a number of instances, the readings obtained by moving 20 feet away from the window became as much as 15 per cent. higher. Therefore it would seem that on a cloudy day readings would be higher than on a bright day. The differences in readings between holding the instrument against a white background and holding it directly between the eye and the light were as much as 10 per cent.[1]

As may be seen from the foregoing comparisons and the observations of others the Fleischl instrument is not entirely reliable; therefore Hammerschlag's table, which is based upon this instrument, must be inaccurate. Taking all these conditions into consideration, there appears to be quite a constant correspondence between the specific gravity and the percentage of hemoglobin, and we think that, with a table based upon a much larger number of cases and a more reliable estimation of the amount of hemoglobin, this method would be as accurate for clinical purposes as the methods now in vogue, and possibly more so.

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[1] See Limbeck, pp. 18, 19, for analogous observations.

Cora Lichty, *Philadelphia Med. Jour.*, 1898, ii., 242-44, gives the following table of specific gravity and hemoglobin equivalents.

Specific Gravity. Hammerschlag's Method.	Hemoglobin Per cent. v. Fleischl?	Specific Gravity. Hammerschlag's Method.	Hemoglobin Per cent. v. Fleischl?
1035–38	25–30	52–54	65–70
38–43	30–40	54–56	70–75
43–45	40-45	56–60	75–85
45–47	45–50	60–63	85–95
47–49	50–55	63–65	95–100
49–52	55–65		

Yarrow and Hitchens[37] have formulated the following table, using standard solutions of hemoglobin for comparison:

Specific Gravity.	Hemoglobin Per cent.	Specific Gravity.	Hemoglobin Per cent.
1030	20	1051	65
1035	30	1052	70
1041	40	1053.5	75
1042.5	45	1056	80
1045.5	50	1057.5	90
1048	55	1059	100
1049	60		

They also strongly recommend because of its accuracy Oliver's tintometer for determining the hemoglobin.

In the following table we have recorded a new series of cases. All of these with the exception of 21, which were kindly placed at our disposal by Dr. Albert E. Woehnert, were made at the Erie County Hospital, and we are indebted to Dr. C. R. Orr for a portion of these records.

In the thirty-one records of persons in apparent health, the greatest difference between the hemoglobin by the v. Fleischl instrument and that estimated from the specific gravity was 19 per cent. The discrepancy in this case was probably due to error in the v. Fleischl reading, since the estimated hemoglobin corresponded very closely to the number of red corpuscles.

In eleven cases there was practically no difference between the estimated and determined hemoglobin. In fifteen of the remaining thirty-one cases the difference was less than 10 per cent. In the simple anemias the correspondence between the two was, as a rule, very close. One case, however, showed a difference of 15 per cent., the determined hemoglobin being higher than that indicated by the specific gravity.

The correspondence in the pernicious anemia, as well as in the chlorosis cases, was close. The carcinomas and sarcomas showed no characteristic difference between the estimated and the v. Fleischl hemoglobin. The three stages of syphilis showed a somewhat higher specific gravity than the percentage of hemoglobin (v. Fleischl) would indicate. In the case of pulmonary tuberculosis with afternoon temperature, the hemoglobin percentage (v. Fleischl) was lower than that estimated from the specific gravity. In the nephritis cases, the difference was slight. In three cases of circulatory disturbance, the hemoglobin per cent. was much lower than that indicated by the specific gravity and in four cases there was practically no difference. In the pregnancy records, the hemoglobin was slightly less than would be indicated by the specific gravity. In the cases of epilepsy, the specific gravity estimated hemoglobin was higher than that shown by the hemometer. In appendicitis, the estimated hemoglobin was lower than that determined by the hemometer; in one case slightly higher. In the remaining cases there was no characteristic difference.

TABLE OF RECORDS.

Case number.	Specific gravity.	Hemoglobin % estimated from sp. gr.	Hemoglobin % by v. Fleischl's.	Blood Count.		Sex.	Diagnosis.	Remarks.
				Reds.	Whites.			
1	1060	95	95	....	....	M	Health.	
2	1060	95	95	....	....	"	"	
3	1060	95	90	....	....	"	"	
4	1060	95	87	....	....	F	"	
5	1060	95	86	....	....	M	"	
6	1060	95	85	....	....	"	"	
7	1060	95	78	....	....	"	"	
8	1059	91.67	91.75	....	....	"	"	
9	1059	91.67	90.50	....	....	"	"	
10	1059	91.67	90	....	....	"	"	
11	1059	91.67	90	....	....	"	"	
12	1059	91.67	86	....	....	"	"	
13	1059	91.67	86	....	....	"	"	
14	1058	88.34	96.5	....	....	"	"	
15	1058	88.34	95	5,400,000	....	"	"	Reds—by hematocrit—5,200,000.

TABLE OF RECORDS—(*Continued*).

Case number.	Specific gravity.	Hemoglobin % estimated from sp. gr.	Hemoglobin % by v. Fleischl's.	Blood Count.		Sex.	Diagnosis.	Remarks.
				Reds.	Whites.			
16	1058	88.34	94	....	....	M	Health.	
17	1058	88.34	90	....	....	"	"	
18	1058	88.34	80	....	....	F	"	
19	1058	88.34	75	....	....	"	"	
20	1058	88 34	74	....	....	M	"	
21	1057	85	85	....	....	"	"	
22	1057	85	78	4,480,000	8,400	F	"	Reds—by hematocrit—4,200,000.
23	1057	85	75	....	....	"	"	
24	1057	85	73	....	....	"	"	
25	1057	85	66	4,480,000	9.375	"	"	
26	1056	80	84	....	....	M	"	
27	1055	75	78	....	....	F	"	
28	1055	75	70	....	....	"	"	
29	1055	75	70	....	....	"	"	
30	1055	75	65	....	....	"	"	
31	1055	75	63	....	....	"	"	
32	1051	66.33	54	....	....			Examined, Dec. 16, '98, July 20, '99, and Sept. 7, '98. Treat.: Iron, arsenic, strychnine. Improved.
33	1054	72.5	74	....	....	"	Simple anemia..................	
34	1060	95	81	....	....			
35	1059	92	88	....	....	"	" "	
36	1059	92	85	....	....	"	" "	
37	1058	88.3	83	....	....	"	" "	
38	1057	85	90	....	....	M	" "	
39	1056	80	75	....	....	"	" "	
40	1054	72.5	75	....	....	F	" "	
41	1054	72.5	70	....	....	"	" "	
42	1054	72.5	70	....	....	"	" "	
43	1054	72.5	70	....	....	"	" "	
44	1054	72.5	65	....	....	"	" "	
45	1053	70	72	....	....	"	" "	
46	1052	67.6	70	....	....	"	" "	
47	1052	67.6	67	....	....	"	" "	
48	1051	66.3	67	....	....	"	" "	
49	1051	66.3	50	3,600,000 3,750.000	18,200 20,300	"	Subphrenic abscess.	
50	1050	65	64	....	....	"	Simple anemia.	
51	1050	65	63	....	....	"	" "	
52	1048	55	35	....	....	"	" "	
53	1045	45	66	3,450,000	31,200	"	" "	
54	1042	42	45	....	....	"	" "	
55	1056	80	80	....	....	"	Pernicious anemia.	
56	1052	67.6	60	....	....	M	" "	
57	1046	48	33	....	....	"	" "	
58	1040	40	40	....	....	"	" "	
59	1040	40	35	....	....	"	" "	
60	1032	25	33	1,344,000	6,250	"	" "	Arsenic, bone marrow, strychnine, cinchona.
61	1043	43	35	1,500 000	12.500	"	" "	
62	1045	45	39	2,520,000	8,000	"	" "	
63	1057	85	83	....	....	F	Chlorosis. Improved.	
64	1055	75	80	....	....	"	" "	
65	1055	75	68	....	....	"	Chlorosis.	
66	1062	95	85	....	15,000	M	Epithelioma of esophagus.	
67	1059	92.3	93	....	... .	F	Carcinoma—stomach.	
68	1054	71 6	62	....	....	"	Sarcomatosis.	
69	1043	43	46	2,400,000	15,400	M	"	
70	1036	31.6	40	....	....	"	Sarcoma in axilla.	
71	1056	77.1	75	....	....	"	Primary syphilis.	
72	1060	95	66	....	....	F	Secondary syphilis.	
73	1059	92.5	85	....	....	M	" "	
74	1058	90.1	64	....	....	F	" "	
75	1056	77.1	78	....	....	M	" "	
76	1045	75	65	....	....	F	" "	
77	1049	60	45	2,900,000	21,875	M	Tertiary syphilis and tuberculosis.	
78	1060	95	68	....	....	F	Tuberculous cervical nodes.	
79	1058	90	82	....	....	M	Pulmonary tuberculosis.....	Afternoon temp're. Purulent sputum.
80	1058	90	80	....	....	F	" "	" "

TABLE OF RECORDS—(*Continued*).

Case number.	Specific gravity.	Hemoglobin % estimated from sp. gr.	Hemoglobin %, by v. Fleischl's.	Blood Count.		Sex.	Diagnosis.	Remarks.
				Reds.	Whites.			
81	1057	85	77	....	....	M	Pulmonary tuberculosis.....	Afternoon temp're. Purulent sputum.
82	1057	85	73	....	....	"	" "	" "
83	1057	85	66	....	....	"	" "	" "
84	1056	80	57	....	....	"	" "	" "
85	1055	75	76	....	....	"	" "	" "
86	1055	75	73	....	....	"	" "	" "
87	1054	71.6	57	....	....	"	" "	" "
88	1053	70	54	....	....	"	" "	" "
89	1052	67.5	62	4,000,000	9,375	F	General tuberculosis.	
90	1050	65	46	....	....	M	Pulmonary tuberculosis.	
91	1044	44	56	....	....	F	" "	
92	1056	77.1	80	....	....	"	Nephritis, chronic interstitial.	
93	1056	77.1	79.5	5,400,000	6,500	"	" "	
94	1055	75	75	....	....	"	" "	
95	1054	71.6	68	....	....	"	" "	
96	1039	39	39	1,400,000	7,800	M	Chronic parenchymatous nephritis.	
97	1060	95	92	....	....	F	" "	
98	1060	95	91	....	....	M	Cardiac asthma.	
99	1060	95	90	....	....	"	Valvular disease.	
100	1059	92.5	92	....	....	"	" "	
101	1058	90	80	....	....	F	Dilatation heart.	
102	1054	71.6	57	....	....	M	Aortic insufficiency, convalescent pleurisy with effusion and pericarditis.	
103	1046	48	62	5,300,000	9,375	"	Aortic insufficiency, malaria	
104	1046	48	38	2,500,000	1,500	"	Valvular lesion.	
105	1060	95	80	....	....	F	Pregnancy.	
106	1059	92.3	84	....	....	"	"	
107	1059	92.3	75	4,000,000	18,750	"	"	
108	1058	90	77	....	....	"	"	
109	1052	67.6	61	409,600	18,750	"	Post partum hemorrhage.	
110	1059	92.3	81	....	....	M	Enteric fever.	
111	1056	77.1	70	....	....	"	" "	
112	1058	90	87	....	....	"	" "	
113	1060	95	85	....	....	F	Epilepsy.	
114	1060	95	80	....	....	M	"	
115	1058	90	85	....	....	"	"	
116	1058	90	74	....	....	F	"	
117	1057	85	65	....	....	"	"	
118	1050	65	75	....	....	"	"	
119	1056	77.1	89	5,750,000	10,900	"	Appendicitis.	
120	1052	67.5	86	5,500,000	12,500	M	"	
121	1050	65	62	2,380,000	10.930	"	"	
122	1059	92.3	90	....	....	F	Neurasthenia.	
123	1058	90	90	....	....	M	"	
124	1057	85	85	....	....	F	"	
125	1058	90	83	....	....	M	Senility.	
126	1057	85	78	....	....	F	"	
127	1060	95	76	....	11,560	M	2d infection after operation.	Inguinal hernia.
128	1052	67.5	70	....	13,125	"	" " "	Femoral hernia.
129	1055	75	68	....	15,540	"	Empyema.	
130	1054	72	80	5,100,000	10.900	"	"	
131	1058	90	70	....	....	F	Chronic suppurative mastitis.	
132	1056	77.1	67	... ...	....	M	Septic thrombosis, vein right leg.	
133	1052	67.5	70	4,880,000	28,781	"	Myocitis (suppurative), axilla	
134	1060	95	92	....	.. ..	"	Chronic diarrhea.	
135	1059	92.3	90	....	....	"	Addison's disease.	
136	1058	90	73	....	....	"	Melancholia.	
137	1058	90	84	....	....	"	Multiple sclerosis.	
138	1058	90	70	5,487,500	28,229	"	Lobar pneumonia.	
139	1056	77.1	77	4,337,500	11,714	"	Hodgkin's disease.	
140	1055	75	65	....	....	F	Rheumatism (chronic).	
141	1050	65	70	....	10,625	M	Gangrene of feet.	
142	1047	50	60	3,900,000	14,800	F	Microcephalus.	

A fair idea of the relation of the specific gravity to the percentage of hemoglobin in the blood is given in Menicanti's conclusions and in those of Dieaballa.

Menicanti[22] says: "In health there is a certain constant relation between the specific gravity of the blood and its percentage of hemoglobin, with very small and varying individual differences. The same holds good in chlorosis, in ordinary anemias and other diseases. In pregnancy and often in heart disease, the relation varies, so that the same percentage of hemoglobin denotes a lower specific gravity."

Dieaballa[5] concludes:

1. The specific gravity of the blood depends, in the first place, upon its hemoglobin contents, but with the same quantity of hemoglobin differences as high as 13.5 per mille specific gravity may occur.

2. 10 per cent. hemoglobin (according to v. Fleischl) denote a specific gravity of 4.46 (according to Hammerschlag.)

3. With the same percentage of hemoglobin, both under physiological and pathological conditions, in women the specific gravity is from 2 to 2.5 lower than in men.

4. The specific gravity varies within wider limits in blood that is rich in hemoglobin, than in blood that is poor in hemoglobin.

5. In nephritis, owing to the hydremia of the plasma, the specific gravity is from 4 to 5 per mille lower than in blood of the same hemoglobin percentage and number of corpuscles in secondary anemia.

6. In leukemia the specific gravity is higher than would be excepted from the percentage of hemoglobin. This difference appears to be in proportion to the greater number of leucocytes.

7. In chlorosis, the specific gravity is about 2.5 per mille higher than in secondary anemia. This difference rapidly disappears during blood regeneration.

8. In those forms of pernicious anemia, where the number of red blood corpuscles is appreciably diminished in relation to the hemaglobin, the specific gravity is about 2 per mille lower than in secondary anemia. During blood regeneration this disappears.

9. The number of red corpuscles in the blood may have a positive influence upon the specific gravity, independently of the hemoglobin, since with the same percentage of hemoglobin differences in specific gravity of 4 to 5 per mille may be produced from this cause.

Our conclusions may be briefly summarised as follows:

1. In most cases the specific gravity and the percentage of hemaglobin of the blood present such a close relation to one another that the latter may be predicted from the former with sufficient accuracy for clinical purposes.

2. Both v. Fleischl's and Gowers's instruments are liable to an error of 10 per cent. or more.

3. There is liable to be very slight if any error in the determination of the specific gravity by Hammerschlag's method.

BIBLIOGRAPHY.

1. *Arronet:* Maly-Jahresbericht für Thierchemic, 1887.

2. *Becquerel and Rodier:* Recherche sur la Composition de Sang. Deutsch von Eisemann, Erlangen, 1845.

——— Traite de Chimie Pathologique. Paris. 1854, p. 39.

3. *Castellano, P. F.:* Sulla Densita del Sangue, Gazz. d. Osp Milan, 1892, xiii., 718-790.

4. *Copeman, I. M.:* Report on the Specific Gravity of the Blood in Disease. British Med. Journ., London, 1891, i., 161-163.

5. *Dastre, A.:* Methode Nouvelle pour la Determination de la Densite du Sang. Arch. de Physiol., 1893, p. 791; also extract Centralb. für die Med. Wiss., Vol. xxxii., p 461.

6. *Dekio, K:* Zur Kritik des Fleischlchen Hämometer. Verhandl. d. Cong. f. Innere Med., Wiesb., 1892, xi., ii., 135-143

7. *De Voto, L:* Ueber die Dichte des Blutes unter Pathologischen Verhältnissen. Ztschr. f. Heilk., Berlin, 1890, xi, 175-186.

8. *Dieaballa:* Deutsches Archiv. f. Klin. Med., 1896, Bd. 57.

9. *Eijkman:* Blutuntersuchungen in den Tropen, Virchow's Archiv., Bd. 126, 1896, p. 113.

10. *Fano, G.:* Di una nuova funzionei de corpuscoli rossi de Sangue Sperimentale. Firluze, 1882, i, 256, 370

11. *Glogner:* Specifische Gewicht des Blutes in den Tropen, Virchow's Archiv., Vol. 126, p. 109.

12. *Hammerschlag, A:* Ueber das Verhalten des Specifischen Gewichts des Blutes in Krankheiten. Centralblt. für Klin Med, Leipzig, 1891, xii., 825-837.

13. ——— Eine Neue Methode zur Bestimmung des Specifischen Gewichts des Blutes. Ztschr f. klin. Med, Berlin, 1892, xx., 444-456.

14. *Koch, A. und Schlesinger, H:* Hämatologische Studien. Beitr. z. Kinderk. a. d. I. off Kinder Rr. Qust. in Wien, 1892, n. F. ii, 1-62.

15. *Hoppe-Seyler:* Beiträge zur Kenntniss der Eigenschaften der Blutfarbstoffe. Ztschr. f. Physiol Chem., Strassburg, 1889 xii, 477-496.

16. *Jones, E L:* On Variations in the Specific Gravity of the Blood in Health. Journ. of Physiol., Cambridge, 1887.

17 ——— Further Observations on the Specific Gravity or the Blood in Health. Jour. of Physiol., Cambridge, 1891, xii, 299-346, 4 pl

18. *Landois and Stirling, W:* Text-book of Human Physiology Translated from 7th German edition, London, 1891, 4th edition

19. *Limbeck v. R. R.:* Grundriss Einer klinischen Pathologie des Blutes. Jena, 1892. Verlag von Gustav Fischer.

20. *Lyonnet B.:* De la Densiti du Sang, la Determination Clinique ses Veriations Physiologiques et Pathologiques. Paris. 1892.

21. *Lichty, Cora:* Philadelphia Med. Jour., 1898, ii., 242-44.

22. *Menicanti:* Ueber das Specifische Gewicht des Blutes und dessen Beziehung zum Hemoglobingehalt. Deutsches Arch. f klin Med., Leipzig, 1882, i., 407-422.

23. ——— Ueber das Specifische Gewicht des Blutes und dessen Beziehung zum Hemoglobingehalt. Arb. a. d. med. Klin. Inst. d. Univer. zu München, Leipzig, 1893, iii, 490-503.

24. *Monti:* Veränderungen der Blutdichte bei Kindern. Abst. Schmidt's Jahr., Vol. 250, p. 189.

25. *Peiper:* Das Specifische Gewicht. des Menschlichen Blutes. Centrabl. f. Klin. Med, 1891, No. 12.

26. *Roy, C. S.:* Note on a Method of Measuring the Specific Gravity of the Blood for Clinical Use. Edinburgh Clin and Path. Journ., 1883-4, i., 561-563.

27. *Schmaltz, R.:* Das Verhalten des Specifischen Gewichts des Blutes bei Kranken Deutsche Med. Wochenschr., Leipzig, 1891, vxii., 555-559.

28. ——— Die Untersuchung des Specifischen Gewichts des Menschlichen Blutes und das Verhalten Desselben bei Krankheiten. Verhand. d Cong. Innere Med., Wiesb., 1891, x., 427-440.

29 *Siegel, C T:* Ueber eine Verbesserung der Royschen Methode zur Blutdichtebestimmung und damit Angestellte Untersuchungen bei Kindern. Prag Med. Wochenschr., 1892, xvii., 209, 222, 235.

30. *Sherrington and Copeman:* Variations Experimentally Produced in the Specific Gravity of the Blood. Journ. of Physiol., Cambridge, 1893 xiv., 52-96.

31. *Von Jaksch*: Klinische Diagnostik. Third revised edition. Wien und Leipzig, 1892.

32. *Yarrow and Hitchens:* Clinical Estimation of the Quantity of Hemoglobin in Human Blood. Univ. Med. Mag., xii., 1 p., 26, Oct.

33. *Ziegelroth:* Einfluss des Aderlasses auf das Specifische Gewicht des Blutes. Virchow's Archiv., Bd. 141, p. 395. 1895.

34. ——— Das Specifische Gewicht des Menschlichen Körpers und Blutes; Zugleich ein Beitrag zur Krassenlehre Virchow's Archiv., cxlvi., 3, 1896, p. 453.

145 ALLEN STREET.

A CASE OF MULTIPLE FRACTURE OF THE INFERIOR MAXILLA COMPLICATED BY DISLOCATION.[1]

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MULTIPLE fractures of the lower jaw are deservedly considered by surgeons and surgical dentists as very difficult cases. Reduction under an anesthetic may be easy, but retention in a proper position is very difficult, and the result often far from perfect. I have considered the following case worthy of report because of its complexity and, happily, its satisfactory result.

In August, 1897, I was called with Dr. Jay W. Seaver, of New Haven, Conn., who was associated with me throughout this case, to attend a boy of nine years, who had a few minutes before sustained a severe injury while riding in a hotel elevator. Curious as to the workings of the "lift" our patient, in an effort to see under the elevator, had, while it was in motion, leaned out of the doorway, and his head was caught under the transom of one of the floor doors. Fortunately, the elevator was instantly stopped or a decapitation would have resulted. As it was, the fractures, shown in the accompanying diagram, were sustained.

Besides these, there was a complete loosening of all the incisors in both jaws, and one lower right incisor was extracted at the time of the traumatism. There was considerable laceration of the soft parts especially about the alveolar processes, and the separation of the symphysis was compound. A dislocation of the right temporo-maxillary articulation, which presented marked deformity, added materially to the difficulty of the case. Marked shock and concussion precluded immediate treatment of the fractures. After the lapse of several hours, reaction set in, chloroform was administered, reduction was made, so far as the marked swelling of all the soft parts permitted, and a combined Barton and Capeline bandage was applied. A small dose of morphine with atropin was given hypodermatically both to quiet the patient and also to lessen the chance of emesis.

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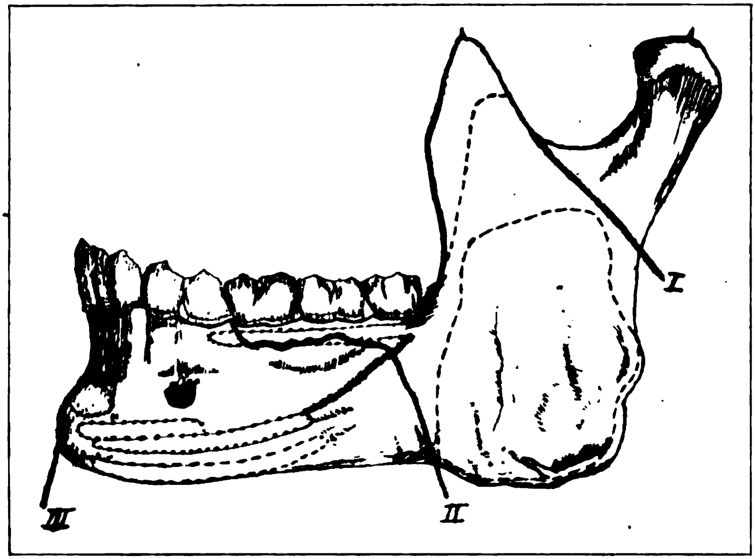
[1] Read at the annual meeting of the Chautauqua County Medical Society, July, 1900.

During the following five days the patient was fairly comfortable and was fed by means of a small rubber tube passed through the space left by the absent second right lower incisor.

FIG. 1. THE LOWER MAXILLA.

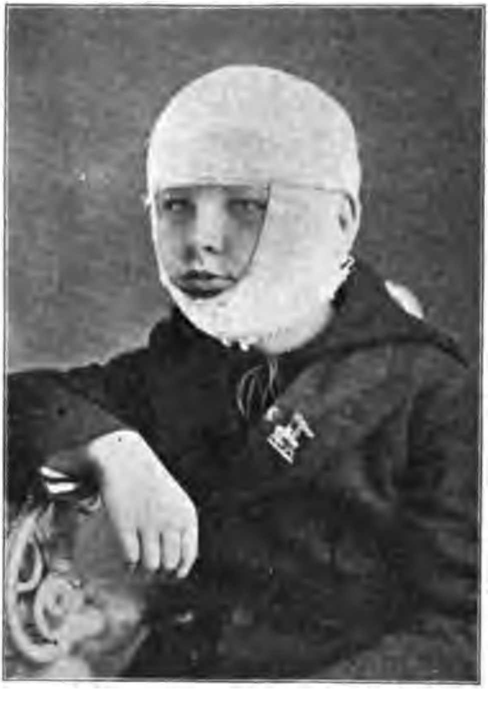


I. Fracture at base of condyle. II. Fracture through body. III. Separation of symphysis.

On August 10th, the swelling having markedly lessened and considerable deformity being evident, chloroform was administered. By the use of fine silver wire the following teeth, which were fairly solid, were wired together; the first bicuspid and canine on the left lower jaw to the first right lower bicuspid, thus holding the separated symphysis in apposition; the first left lower to the first left upper bicuspid on one side and the second bicuspid on the right upper to the second bicuspid of the lower of the same side. The jaws were then tightly bandaged together, using the superior maxilla as a splint for the inferior. A plaster-of-Paris bandage was applied in the same way as the previous splint. There was great difficulty in holding the fragments of the ascending ramus in their proper position. Overriding was prevented through marked pressure by means of small pads placed next the skin. After a week the wire was removed.

The bandage was kept on until after the boy's return home to Syracuse, on September 9th, when Dr. F. H. Butler, of that city removed it. The condition was satisfactory and a simple bandage was reapplied. Up to this time the tube and an occasional pouring of fluid between the teeth were the means utilised for feeding.

FIG. 2. THE PATIENT.



THE DRESSING IN SITU.

On September 18th, all retentive apparatus was permanently removed, and the patient began to eat normally; at first, restricting his diet to soft materials. At that time the lateral motion toward the fractured side was more marked than toward the side which had

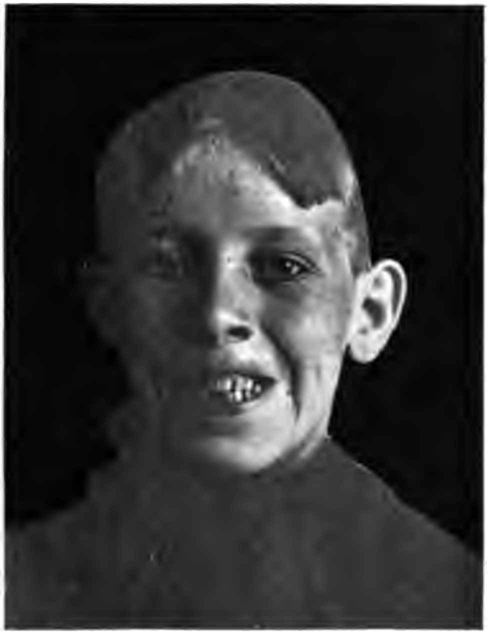


FIG. III. SHOWING IRREGULARITY OF TEETH.

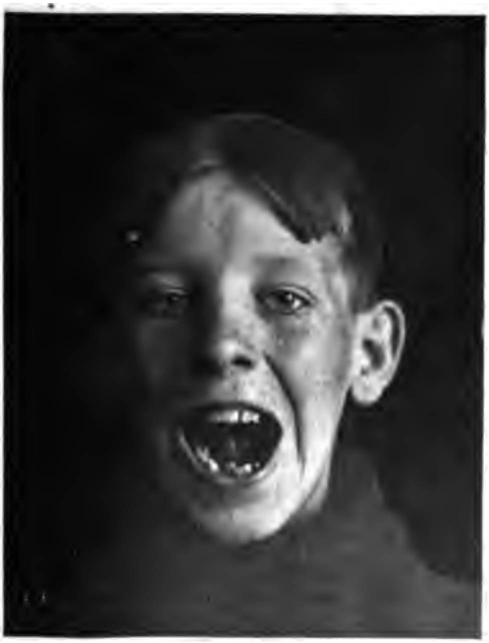


FIG. IV. SHOWING APPEARANCE OF SECOND RIGHT INCISOR TOOTH.

been dislocated. Accordingly, the patient was instructed to try to gradually overcome this tendency and his efforts proved very successful.

October 22, I saw the case and found everything satisfactory, except for a considerable deposit of callus just anterior to the left tragus.

In July, 1898, I presented the case before this Society for inspection. The boy was examined at the meeting by many of the members, and but two detected that there had been anything abnormal about the inferior maxilla. I mention this fact simply to show how perfect had been the result even at that time.

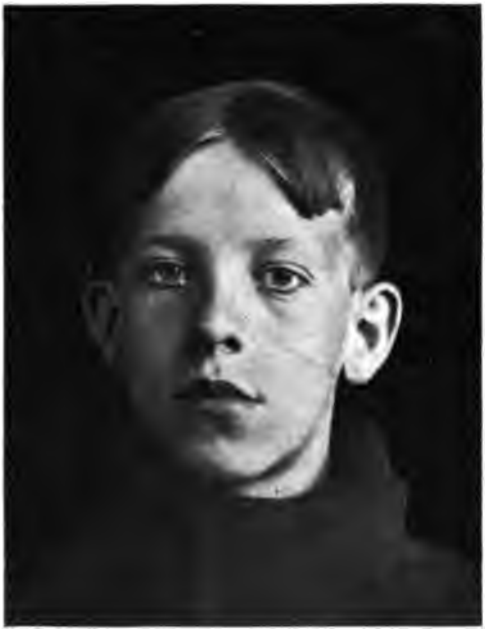


FIG. V. AS PATIENT APPEARS TODAY.

A few of the teeth are irregular in position (Fig. 3), but this defect which is no more marked than in many uninjured alveola processes, could be rectified by any efficient dentist. Fortunately, the result is perfect, the lump of callus has almost disappeared and the features are unmarred.

One added point of interest is in connection with the second right incisor. (Fig. 4.)

The tooth of a well-developed healthy child of nine years of age usually belongs to the second dentition. At the injury this tooth was extracted and yet today, we have a new incisor already through the gum, to the extent of one-third of an inch; thus we may have here an example of a third dentition.

THE PHYSICIAN.[1]

By WILLIAM STANTON, M. D., Varysburg, N. Y.

MEDICAL effort first arose from human sympathy. The friends and comrades of the sick and injured began the work, and the continuation of human suffering has constantly supplied material for those whose special fitness or generous impulses have called to this field of labor. Year upon year, and age upon age, those who have preceded us have earnestly and faithfully pursued this labor of love and mercy, gathering truth and wisdom to furnish the wonderful storehouse of knowledge to which we of today have access.

Do we appreciate our opportunities, or realise our responsibilities? Are we, each of us, doing our full duty to alleviate human suffering and add something to the sum total of medical knowledge to be left to our successors? True, we can not all lay claim to the genius which makes men inventors, but we may be able to detect errors, or bring together and put into useful form, and help assign their proper place, the discoveries of others, and thereby become only a little less useful than the discovers themselves, who often lack time, and frequently the ability to put into practical form their own inventions.

A great mistake made by many is to seek reputation at whatever cost. Now, a man may acquire a reputation, good or bad, dependent largely upon the influence, energies and volubility of his friends or enemies, but this is not success, neither is it the road to success.

The first requisite of true success is character, that wonderful structure of our own building, that quality by which we remember men when they are gone. It has been said of Gladstone "He gave us many gifts, but the most precious, and the most enduring, was himself—his character," and of his life; "he lived and labored with God before his eyes, and made a conscience of what he did."

Our profession requires of us knowledge, skill and devotion, and the first and highest aim of the physician should be to establish character. Surrounded as we are by ignorance and deception, false ideas of life and its purposes, compelled, as some of us are, to work, to plan and to economise, there are many temptations which tend to draw us from the straight and narrow way. The desire for worldy applause, the constant endeavor to surpass, the haste to acquire fame or fortune, are full of snares, but let us look these matters square in the face, and meet them bravely, as we would a contagious disease.

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[1] Presidential address delivered before the Wyoming County Medical Association, July 10, 1900.

We have all seen those in our own profession who, filled with a narrow, selfish ambition, seek reputation and financial success by unworthy means. We have heard their praises rise from the lips of a multitude of their henchmen. We have heard their criticisms of our professional brothers and ourselves; we have seen some of our best families join their ranks; yes, we have even paused some times and honestly asked ourselves: "does it pay to do square business, when some blatant quack or unprincipled wretch can so easily gain a following?" But just make an inventory of your losses and you will see that while you have lost a few good families, you have also lost several who frequently need a doctor dark nights and stormy days, who are always ready to take much medicine, but never quite prepared to settle your account. "Let not your heart be troubled," for even genius without character will only blaze up for a time. The reputation gained so easily will not endure.

The practitioner who makes a case of diphtheria of every follicular tonsilitis and appendicitis, of obstinate constipation, gains his notoriety at a ruinous cost, and he who strives to build for himself by backbiting his professional brethren, and refusing to meet his neighbors in council, criticises, complains and slanders, is using a weapon unsuited to the hand of an educated gentleman. It is the weapon of a pagan—a boomerang, which will surely return and reveal from whence it came.

Probably few men ever fully realise their ideal, but unless we aim high, there is no possibility of our path in life ever rising above the horizon. It is also true that only a few ever gain fame or fortune, but the hope is open to all, and as members of the grandest profession in the world, whose work is the Godgiven mission of protecting health and combating disease, thus making the lives of His creatures more certain, more happy and longer, we should honor our calling by nobleness of character, faithfulness to duty and diligence in pursuit of our ideal. And this should be the highest which is given on earth for man to follow—none other than the lowly Nazarene, who exemplified in His life and work among men what the ideal physician should embody.

No doubt some of you will say this is impractical and Utopian, but I want to tell you that what we need in our lives and work today is more of this ideal. Brought as we are face to face with the entrance and exit of souls upon the shore of time, we can not avoid the tremendous problems of life and death and must recognise an overruling providence and an unseen spiritual life. Said Professor

W. W. Keen in a recent address: "That this life with its joys, its diseases and disasters is all is denied alike by common sense, by reason and by revelation. He is the best physician who takes account of the life hereafter, as well as the life that now is, and who not only heals the body, but helps the soul." We are not called into the homes about us when health and happiness abound, but when the clouds gather, when come sickness or injury, or weariness over this world's cares, then the physician is called in, and he who can do the best work in that stricken home, is he, who, while possessing a thorough scientific knowledge is also prepared in heart and character to enter the confidence and sympathies of its inmates. Intemperance, immorality, or indecency of thought or action should never be his, but his character should be so far above reproach, and his life so like the Master, that not only those bowed with age, but the anxious mother, the young wife, coy maiden, or frightened child, may trust him in their hour of trial and so yield to him the inmost secrets of their lives; for these he must needs know, because the successful physician is he who sees and reads human nature as it is. He not only studies all the physical influences of climate, food, occupation, etc., but he also considers well, the influence which the emotions of fear, hope, anxiety and sorrow have upon the patient. There are times when the gentle touch of a friend, the calm sympathetic words of the family doctor, can give assurance to the sick, and hope to the anxious, when no medicines are of avail, and it is in this capacity that we can often carry hope and encouragement into many homes. We should keep in conscientious remembrance our duty of professional secrecy. Better suffer misconception or blame from reticence than repeat even petty matters of gossip and betray our patient.

A place where physicians sometimes betray weakness is in their relations to their brother doctors. Remember that every word of kindness and praise spoken of another practitioner, elevates the standing of the profession as a whole. The reverse is no less true. Therefore, hesitate long before expressing an unfavorable opinion of a neighbor or his work, especially from a layman's account.

The best physicians identify themselves with the organisation of their Fellows, not in name only, but in deed and in truth. I challenge you to show me one who has ever gained a worthy fame, who has not been an honored and respected, and active member of a learned guild. Our duty to our association should mean something to each of us; it should mean that we contribute something more than an occasional attendance towards its success. While serving as a member of the committee on program, I was astonished to find how indifferent men are to their opportunities. I say opportunity, and such it is, when we are asked to write a paper upon a subject of our own selection, for in this way, and this way only, for most of us, can we bring before the profession the light we have gained from personal study and observation. Medical practice is as varied as human experience, and we are each entitled to the other's deductions and conclusions. "Let your light so shine before men that they may see your good works," is the scriptural injunction. I am well aware that it requires time and effort to prepare to write upon or discuss a scientific subject understandingly, unless it be something to which we have previously—and at the pace science travels today, I may add continuously—devoted special attention, but I believe it is an unfailing rule that the greatest individual profit is always to the one who makes the preparation. The member of this association must be, indeed indolent, or impotent, or both, who has not the ability or inclination to contribute something to a cause of which he is a part.

One curse to our profession which affects its victims as the blight does a pear tree, is the twin brother of the patent medicine fiend, the presuming pharmacist, who floods us with trash for our waste basket and samples with which to pollute the waters of neighboring creeks. Some of these things are said to chase bacteria out of the hidden regions in our patients; some remove cancers, and still others organise fife and drum corps among the blood corpuscles for campaign purposes, and the formula of each is kept secret to ensure the continuance of the present "specially skilful compounding," and "avoid substitution," other pharmacists being unskilled and dishonest. This arrangement is, of course, for the benefit of the physician, and it enables him to secure it at the very reasonable price of one dollar per ounce, six ounces for five dollars, and makes the practice of medicine so easy. He can simply arrange and label the symptoms and then give the remedy advised by the aforesaid pharmacist. It requires exceptionally acute eyesight to see the difference between these proprietary articles and the ordinary patent medicine, and I believe they are all a snare and a delusion, and that he who stoops to this unscientific method and allows the other fellow to practise medicine for him is not using the intellect the Lord gave him, or the education he worked hard to get, neither is he doing his duty by his patient. Your patient employs you to treat him according to your knowledge and judgment.

I believe the profession should take a decided stand on this matter, for the use of these secret and proprietary remedies robs the doctor, deceives the patient and degrades the practice of medicine. Legitimate pharmacy is one of our best aids, but the honest compounder needs no secrecy or trade-mark any more than does the honest diagnostician.

The mistakes and fallacies of medical practice have been many. If you question this, just glance over the history of medicine and see how few remedies and methods of fifty years ago have withstood the test of time and the searching eye of scientific investigation. It often requires fine discrimination to discern between fact and fallacy, and the sifting of the wheat from the chaff is a labor of time, requiring careful and prolonged investigation; therefore, as a rule, it is well for the country physician, whose practice is forever open to criticism, to not be the first to test a new theory, but leave the experimenting to those whose cases are securely hidden in the large hospitals, where your competitor's friend never comes and the neighbors cease from troubling. But watch the reports of their results and be ready to accept truth.

The best physician is always a conservative man; he is also a careful man. Probably most individual mistakes occur from carelessness. Our work rightly claims all there is of us, if we are to succeed. We must invest our time, our energies and our money, for we can not do our best work without a proper equipment. But important as are our instruments of precision, they can in no wise replace the skilful touch, the watchful eye, the attentive ear, or the careful mind, which collects all the facts gained by the numerous avenues of investigation, and deliberately weighing them, arrives at a diagnosis and formulates a line of treatment. Do not allow your technical interest in a case to overshadow your personal interest in the patient, and put into the care of each a patience, a thoroughness, and a personal interest, such as if it were your only case, for while he likes to feel that his doctor has at his command the latest and best means of scientific investigation and is employing them for his benefit, it is also a fact, that he wants relief, and he wants it quickly.

The ever widening opportunities and necessities for scientific search and investigation, in so many and varied directions, demands of the physician a more extended knowledge and use of laboratory and technical work. But laboratory results should be given only their true place, for of two patients showing the presence of certain germs one may develop the disease, which is said to be specific, while the other does not, and again the characteristic forms of bacteria may depend as much upon the location of the growth as upon the germ itself. So to ignore the ordinary physical symptoms and trust to the laboratory alone would be, to say the least, poor judgment. On the other hand, the physician who trusts alone to the physical manifestations also ignores one of his most important diagnostic aids.

Health and disease are often spoken of as if they were things and not processes, and we are apt to overlook the fact that the body is not a thing of itself, but a wonderful organisation of living cells, each with its particular duty, and each manifesting its energy of life, by maintaining from its environments that fine balance which we call health. When this balance is disturbed, and the manifestations of cell life perverted, then we have disease, either local or general, as the case may be—not a thing but a life process as modified by its environments. Germs if present are simply factors in these abnormal processes and their detection is but one link in the chain of symptoms, indicating a certain morbid process. To be sure, we can not have tuberculosis without the tubercle bacilli, but on the other hand their presence is not tuberculosis, for they will not develop tuberculosis if placed under the bark of a tree. It requires other factors to secure their development and their destructive action. The same is true of other germs and the diseases to which their presence gives certain definite characteristics.

The early recognition of those processes, known to us as diphtheria, tuberculosis, and the like, rests largely with the microscope and the early detection of the essential and distinguishing link enables us to save untold suffering and many precious lives. If this were the only use of the microscope it would fully justify the attitude of the most successful physicians, who are depending more and more upon laboratory aid. The bacteriologist and pathologist are their frequent consultants.

It appears to me that the weak point here is that, as a rule, the man at the microscope has little or no knowledge of the case itself, and his reports are of necessity somewhat arbitrary and empirical. The two should not work independently, but the physician should be his own bacteriologist and laboratory director. He should not be satisfied to receive the report second hand, but should see for himself, then he will fully understand all the conditions, both clinical and laboratory, and be able to judge knowingly. In other words, every successful physician should have his own laboratory fully equipped for all ordinary work. I see no reason why he should not make his own examinations of cultures, urine, sputa and blood; fix, imbed, cut, stain, mount and examine microscopically his own pathological work.

As has been indicated, the detection of certain germs may in same cases confirm a diagnosis, or may render it uncertain when weighed with the other symptoms, the search for them being only one step in the study of disease. But it is a step of rapidly increasing importance and I have found that I often resort to microscopical examinations with much profit and a keen sense of satisfaction in cases where formerly I would have thought it superfluous, and I believe you will find the same satisfaction if you will bring these facilities into your own offices. But some of you will urge that you have not the time for such work. Well, if it is anything except the actual practice of medicine which is taking your time, abandon it, or else abandon medicine, and give place to some one who will do their duty by their patients. If it is an extensive practice which takes all your time,well and good,you are just in the position to take unto yourself a competent assistant, who can do some part of the work and thus become useful himself while greatly increasing yours. Furthermore, it furnishes a most pleasant and interesting diversion, not to say useful and profitable. It makes a physician less dependent and brings him into actual touch with scientific progress, and nearer to the secrets and wonders of disease. But I fancy you who have visions of greatness not in harmony with these remarks are weary and that you who will accept my ideal as yours, have already said amen.

I can think of no more fitting words in closing, none better suited to promote my ideal than those beautiful words of Gladstone: "Believe me when I tell you that the thrift of time will repay you a usuary of profit, beyond your fondest expectations, and that its waste will cause you to dwindle, mentally and spiritually, beyond your most gloomy apprehensions."

ANTITOXIN IN CEREBRO-SPINAL MENINGITIS.

By FRANCIS M. O'GORMAN, M. D., Buffalo, N. Y.

I WAS summoned in great haste about eight o'clock one morning to see an infant who, the messenger said, was dying of convulsions. I hastened to the house and found a six months old child in a comatose condition, from which it would arouse with a general clonic convulsion, lasting from two to five minutes. Its temperature was 105°; respirations, 95, and pulse 190. The breathing was loud and stertorous, easily heard in any part of the house, all the accessory muscles of respiration being brought into action in its attempt to obtain air. Hardly any costal breathing existed, but the abdominal was greatly exaggerated. A sharp, ringing, brassy cough, followed by an attempt to inspire, invariably threw the child into a spasm. The family said that the child had had a severe cold for about a week. I immediately put the child in a warm bath and gave it fifteen grains of sodium bromide and a few drops of tincture of belladonna. These measures seemed to relieve her for a few moments, but she would be seized by another convulsion from an apparent effort to breathe. I decided that there was an obstruction in the larynx and introduced my finger well into the child's throat, and removed a great quantity of mucus and what looked like fibrous membrane. The result was that the breathing became easier. The convulsive seizures, however, came on in a short time, and I relieved the child again with my finger. I then gave it a teaspoonful of syrup of ipecac by mouth and half a drachm of sodium bromide per rectum, These drugs were also fruitless. Warm baths, mustard footbaths. ice cap and antispasmodics were ineffectual. I resorted to chloroform, and while it was producing its quieting influence, I examined the child's chest and found tubular breathing and large moist râles. I hunted in vain for an area of vesicular breathing. Percussion revealed a dulness all over. Taking into consideration the apparent obstruction in the throat, the physical examination, the pulse, temperature and respiration, I decided that the child had a broncho-pneumonia and laryngeal diphtheria.

I sent for 1,000 units of anti-diphtheritic serum, and in the meanwhile applied mustard poultices to the thorax, back and front. When the serum arrived, I injected it all at once. I watched the effect of the antitoxin carefully. In two hours the temperature had fallen to 103°; the respirations to 86; the convulsions had almost ceased, but there was no change in the pulse. About four o'clock in the afternoon she had her last convulsion. At six I injected 500 units of antitoxin and subsequently the breathing became easier. The child remained in the stupor all day and night. The next morning its breathing again became difficult, whereupon I injected another 1,000 units of antitoxin, with the same result as previously stated. During the day the nurse noticed some twitching of the limbs. Some difficulty in swallowing nourishment was evident. Along the latter part of the day I injected 500 units more of antitoxin, making in all

3,000 units administered in thirty-six hours. Its beneficial influence was manifested in the absence of the convulsions and twitchings, and the ease with which she breathed, although the rapidity was not much diminished. I then began to administer oxygen, attaching the tube to a rubber nipple, which the child was in the habit of holding in her mouth. The oxygen was continued uninterruptedly for four days and then for fifteen minutes during every hour. After the first week it was given every two hours and then three or four times daily. The breathing became easier and slower, but did not go below 72 for 10 days. When it did begin to come down, it did in jumps of 10 and 14, but it hovered around 40 for several days. At the end of the third week it was between 20 and 30, and the child seemed to be in good condition. Its temperature had fallen after the first week to about 100° and gradually came to normal. The pulse was the alarming factor. It remained between 150 and 182 for about two weeks, and then fell to 140, where it anchored, even after the lungs were cleared up. All during this illness the child took its nourishment and retained it. Its bowels and kidneys needed no stimulation. Recovery was complete. The child became as fat, healthy and good-natured as ever. The extraordinary rate of pulse and respiration were the puzzling points in this case; also the manner in which they fell to normal or thereabout. The child enjoyed the best health for two months. Then I was called at three o'clock in the morning and found the child in convulsions more violent than those of two months previous. I saw the child the day before and it appeared well. Urethane was given in one grain doses every hour which seemed to relieve her along in the afternoon, when a consultation was held and my diagnosis of cerebro-spinal meningitis confirmed. During the night urethane lost its power and chloroform was resorted to. It eased it somewhat, but not entirely; the patient died at four in the afternoon. The convulsions previous to death were terrific, rolling of the head and eyes, photophobia and opisthotonos, being very well marked. I believe that the extraordinary pulse and respiration of the previous illness was due to a latent inherited meningeal inflammation, because the father has since given me a history of the disease in his family. I am fully satisfied that the antitoxin had a beneficial effect upon the convulsions in the previous attack, and also that the child had diphtheria and pneumonia. Three physicians who saw the case corroborated my diagnosis. A question upon which I invite comment is: did the antitoxin administered in the first attack have any influence upon the pulse, respirations and convulsions, which I believe to have been due to meningeal imflammation? also, am I right in thinking that had an antitoxin been used in the last attack the child might have recovered?

THE CARMICHAEL.

Society Proceedings.

THIRTEENTH INTERNATIONAL MEDICAL CONGRESS, PARIS, AUGUST, 1900.

(Abstracts.)

CAUSES OF THE GENERALISED INFECTIONS BY THE GONOCOCCUS.

By A. H. WARD, F. R. C. S., England.
Surgeon to the London Lock Hospital.

THE generalisation of the gonorrheal infection cannot be logically separated from the local focus whence it originates. There is a continuous interaction, and the persistence of the local disease aggravates the general condition. The whole process of the struggle for life between the microbe, and the human organism, has to be studied, and from the facts thus collected, a plan of action for prevention and cure, deduced. Whether the diplococcus of Neisser and its toxin, is the sole cause of the local and general disease, or whether this infection merely paves the way for other organisms, is still an open question. The fact remains, that gonorrhea and its associated pathological states, are due to the presence of microbes and their toxic products. The particular microbes, their names and staining reactions are questions for the final decision of the bacteriologist and laboratory expert. The reporter has no personal excursions into these special realms to bring forward, but will endeavor to synthesise the observations of many specialists, in the light of clinical experience, and so build up a coherent conception of the life history of the infection in relation to man.

The struggle for life between the microbes and the body.—The thesis advanced is as follows: the gonococcus in its process of growth in the body produces an irritating toxin, which is the direct cause of all symptoms, both local and general, in every case the toxin is absorbed into the system, where it causes systemic degenerations of varying degrees of severity. Gonorrhea is thus a general toxemic affection, but the microbes which form the toxin are generally localised in, or around, a mucous tract. The infection may spread by continuity to the ducts and organs which communicate with the tract affected, or it may penetrate to the interior of the body, either by direct extension, or by a process of growth through the mucous membrane affected. Thence the invasion reaches the cellular tissues, the lymphatics and glands, and the vascular system. This invasion is rendered possible by the paralysing effect of the toxin absorbed upon the leucocytes, which in susceptible individuals, hinders the process of phagocytosis. Having reached the circulation, the microbes are conveyed to the heart, or to terminal capillary circulations in serous and synovial membranes, or to the slender vessels in tendons and fibrous structures. In these situations they become stranded, and develop, forming more toxin, which sets up local inflammations. The invasion of the organism is favored by all too-energetic measures, directed to the local infection, since these depress the local powers of resistance; and by abraiding or lacerating the mucous surface, may directly open doors to the invaders. General treatment should be directed to the general toxemia when present alone, or to the toxemia complicated by metastases. Local treatment is always required, and should be free from instrumental, mechanical, or chemical violence.

The toxin of the gonococcus and its absorption.—The demonstration of its existence and properties. Its absorption the cause of the malaise, temperature and anemia, seen in all severe cases. The local discharge is the osmotic and chemotaxis, equivalent of the toxin absorbed. Grave general toxemic degenerations occur in exceptional cases. Cachexia, nervous affections, optic neuritis, erythematous, hemorrhagic, and hyperkeratitic skin diseases are the signs of such degenerative processes. The distinction between these general toxic effects and the local inflammations caused by metastases.

The invasion of the tissues by the gonococcus.—This invasion only possible, when the leucocytes are inhibited by the toxin absorbed from the primary focus. The action of local antiseptic measures.

The action of the toxin on the leucocytes.—Drobny's researches, Heiman's case. Brewer's views on the invasion of the lymphatic system.

The gonococcus in the blood.—Demonstration by Panichi, by the cultivation method. The invasion of the joints generally sparse, and followed by chronic inflammations. Cardiac disease.

The local effects of the toxin developed in metastases.—Reinforced by the toxin absorbed from the primary focus. The destruction of this focus necessary in all cases.

Prevention and cure.—General toxemia attacked by measures directed to the elimination, or attenuation of the toxin. Metastases attacked by germicides. The dangers of local violence. A case in point. The reporter's experience of generalisations—12 in 2,000 cases or 0.6 per 100. Neisser's words re-echoed: "It is surely beyond a doubt that the frequency of complications depends on the method of treatment."

TREATMENT OF CARCINOMA OF THE UTERUS.

By THOMAS S. CULLEN, M. D., Baltimore.

The speaker briefly referred to the gradual improvement in the operation for carcinoma of the uterus, commencing with amputation of the cervix as practised by Schröder and his contemporaries, abdominal hysterectomy as recommended by Freund, the catheterisation of the ureters as employed by Pawlick and Kelly and the more radical operation consisting in the removal of the iliac glands as advocated by Ries, Rumpf and Clark. Cullen then pointed out the danger of implanting carcinomatous into healthy tissue as is very likely to occur when the radical operation is performed. He then described in detail the operation as performed by Werder, of Pittsburg. In this operation the chance of implanting carcinomatous tissue is reduced to a minimum. The various stages in the abdominal operation, where the cancer is limited to the cervix, are as follows:

1. Removal of broken down carcinomatous cervical tissue, preferably a few days before.
2. Insertion of ureteral bougies if desired.
3. Ligation of the ovarian vessels and round ligaments.
4. Freeing of the bladder from the uterus and broad ligaments.
5. Opening of broad ligaments, location and freeing of the ureters to the points at which they enter the bladder.
6. Ligation of the uterine vessels near their points of origin.
7. Dissection of bladder free from vagina vault.
8. — rectum from — —
9. Removal of pelvic lymph glands.
10. Freeing of vaginal fornices.
11. Closure of pelvic cavity by uniting the vesical peritoneum with that of the rectum, an assistant meanwhile making strong traction on the cervix from below.
12. Closure of the abdomen.

13. Ringing of the vaginal vault with a thermo-cautery or knife, thus freeing the uterus and its surrounding vaginal mucosa.

14. Application of a light gauze pack to the space left in the vaginal vault.

As will be noted the uterus is freed on all sides, the vagina dissected loose from the bladder and rectum and the pelvic and abdominal cavities closed before the operator comes in contact with the carcinomatous cervix. Even then there is little or no danger of transplantation of carcinomatous tissue. Cullen advised this operation in all cases where the patient is not excessively stout. Of course in such instances we have frequently to rely on a vaginal operation entirely. In adeno-carcinoma of the body of the uterus the same operation may be performed, but the wide removal of the vaginal mucosa is not necessary. The speaker then briefly analysed 176 cases of carcinoma of the uterus occurring in the Johns Hopkins Hospital during the last six years.

General summary of the cases of carcinoma of the uterus:

Variety of Carcinoma.	Operative cases.	Patients well January 1, 1900.
Squamous cell carcinoma of the cervix	61	13-21 per cent.
Adeno-carcinoma of the cervix	12	2-16 per cent.
Adeno-carcinoma of the body of the uterus	30	19-63 per cent.

Cases coming too late for operation.

Squamous cell carcinoma of the cervix	62 cases.
Adeno-carcinoma of the cervix	6 cases.
Adeno-carcinoma of the body	5 cases.
Total	76 cases.

The prognosis is most favorable in adeno-carcinoma of the body; least promising in adeno-carcinoma of the cervix.

ARTIFICIAL FOODS.

By Prof. A. JACOBI, M. D., L.L. D., New York.

The results of the analyses of human milk are contradictory, no two are alike. Alterations in different periods of lactation which are asserted by some are denied by others; those caused by menstruation, sickness, or ingesta are either well understood or dimly appreciated, but rarely measurable. The nature of its proteid, whether uniform or compound, is not sufficiently known. Whether there is an essential quality that is beyond the domain of chemistry is not known. That is why so many and so different iron clad rules have been established for the selection of substitutes, and why the uncertainty has rendered experimentation with commercial substitutes, by chemists and even by respectable clinicians, so common.

If human milk were a uniform body, the demand for an exactly equivalent substitute would be justified. Nature, however, is more liberal in allowing latitude than a chemist.

Heat both improves and injures milk. When milk is exposed to 68-70° C. ten or fifteen minutes heat destroys the bacterium coli and b. lactis aerogenes; after long exposure, it kills pathogenous germs; at 80° C. it coagulates albumin and changes the taste and odor of the milk. Even at 70° C. it changes casein so as to impair its value for dairy purposes. In boiling, a part of the albumin is deposited, the lecithin is destroyed, the fat altered, both chemically and physically. Serious changes appear to take place, through long boiling, both in casein and in nuclein. High temperatures continued for hours are required to destroy some of the long lived spores; their injuriousness, however, is not entirely clear.

Boiled, pasteurised or sterilised cow's milk is never woman's milk; it is not a curative agent, it affords, however, the great advantage of destroying fermenting and pathogenous germs; that is why it is indispensable in large cities and during the prevalence of certain epidemics, and wherever fresh and unpolluted milk is not accessible. When employed as exclusive infant food, cow's milk, watered or not, is liable to cause constipation, or diarrhea, rickets and scurvy. To preserve its antibacteric effect, heat should be followed by immediate and rapid cooling, but not freezing.

Ample dilution of the artificial food of the infant, and particularly of the newly born, is required because of the heterogeneous composition of cow's milk; even those who are as usual put to an incompetent breast require water to combat loss of weight and the tendency to nephritis and to nephrolithiasis, the former of which is still more frequent than the latter, indeed very frequent. A large amount of liquid does not interfere with the motility of the stomach and does not cause dilatation, firstly because the normal infant is no glutton and secondly because absorption begins at once.

Easy and equal digestibility of the casein in woman's and in cow's milk is either asserted or denied by good observers. When cereal decoctions are mixed with cow's milk its casein is claimed and proven to precipitate in fine tufts. On the other hand, cereals are said to have no such effect any more than water. Water, however, is recommended by the same authors as addition to cow's milk. This contradiction is met with those who recommend dextrinised flours for the dilution of cow's milk. The digestibility of a certain amount of amylum, such as is contained in cereals, has been erroneously and persistently denied when it had long been proven both by experience and by experiments to exist.

Cereal decoctions are the proper diluents for the surplus casein of cow's milk.

Milksugar is partly absorbed in the stomach, partly in the intestine, partly changed into lactic acid. It is required for digestion and is an antiseptic. Not enough of it, however, can be given to have the latter effect to the same degree that is exerted by flours. Besides, milk peptones disappear with acid fermentation. That is why milk-sugar should not be given in large quantities but other carbohydrates, in its stead. Cane sugar should take its place, particularly as for the purposes of digestion there is milk sugar enough in cow's milk that forms part of every artificial food, and because there is a ferment in the intestine of the young which inverts cane sugar and renders it absorbable. Besides, every other carbohydrates has the same power to protect albumin against putrefaction.

Fat is added to cow's milk for the alleged purpose of increasing its nutritive property (by preventing the loss of the fat and albumin of the tissues), and by loosening and separating the minute particles of casein.

It should be remembered, however, that even human milk contains often so much fat as to cause "fat diarrhea," that the normal infant feces eliminate unchanged fat in goodly quantity, that moreover the fat globules of cow's milk are larger, less numerous, and less absorbable than those of woman's milk, that the two fats are not equal chemically, and that the urine is liable after feeding with cow's milk fat to contain ammonium, and the gut toxins.

The mineral constituents of cow's and human milk are different. The addition of chloride of sodium to artificial foods is required both for physiological and chemical reasons.

Home-made artificial foods are preferable to the proprietary foods of the market, for many reasons.

The separation of the component parts of cow's milk by mechanical means and the recomposition of the same is a procedure of doubtful value.

Experience of the physician and of the well directed public at large is equivalent at least to laboratory and library theories based on facts that are sub judice.

THE PATHOGENY OF GOUT.

By Sir DYCE DUCKWORTH, M. D., L.L. D , London.
Physician and lecturer on medicine St. Bartholomew's Hospital, London.

1. That gout as a morbid condition depends on an inherent vice of nutrition, which is manifested by an imperfect metabolism in various organs or parts of the body, presumably in the kidneys, and probably in the liver.

2. That this trophic disorder or inadequacy (ralentissement de nutrition) leads to the formation of uric acid, probably in excess, and to the periodic retention of it in the blood (gouty uricemia).

3. That histology throws no light upon the intimate nature of this defect which thus relates to cellular potentiality, possibly under neuro-trophic influence, and not, so far as we know, to structural alteration.

4. That this textural disability, or a tendency to it, may be primarily acquired, and also transmitted as a fault, thereby inducing from time to time uricemia with gouty manifestations in the descendants.

5. That in most instances, under conditions which provoke it, and in some cases independently of these, attacks of gout may grow up and come to a crisis. Such crises are attended by an alteration in the solubility of the uratic salt in the blood, whereby irritating crystals of biurate of sodium are produced, and precipitated in various parts of the body.

6. That a paroxysm of gout, the sites of its occurrence, and its metastases, are determined by nervous influences, probably dominated from the bulbar center, and that the local attacks alight either in the joints, or in textures which have been weakened or rendered vulnerable by impaired nutrition, owing to past injury or over-use.

7. That this central neurosis is an essential and transmissible feature in the pathogeny of gout, and pertains to the arthritic diathesis generally.

8. That the uricemia of gout is peculiar and unlike that which is induced by other morbid conditions, but that the occurrence of uricemia in the gouty is by itself inadequate to induce attacks of gout.

9. That uratic deposits in any part of the body may be removed in course of time, but are apt to be permanent in the least vascular tissues.

10. That uratic deposits may occur to an enormous extent in gouty persons without the occurrence of any pain or paroxysms.

11. That the clinical features of gout indicate that both hemic changes (due to inherent morbid tissue metabolism) and a neurotrophic disturbance act as pathogenic factors, and that, consequently, gout is to be regarded as a neuro-humoral malady.

BUFFALO ACADEMY OF MEDICINE.

REPORTED BY THOMAS F. DWYER, M. D., Secretary.

THE regular quarterly meeting of the Buffalo Academy of Medicine was held at the Academy rooms, Public Library Building, Tuesday, September 11, 1900. The president, Dr. MARCEL HARTWIG, called the meeting to order at 8.50 p.m.

The minutes of the last quarterly meeting were read and approved.

The council recommended the election of Drs. William C. Fritz, Julius Pohlman, Ray H. Johnson, Nelson W. Wilson, Charles A. Brownell, Isaac C. Munson, Frank W. Field, William L. Phillips, Herman B. Singer, Jacob S. Otto, and John W. Cameron, for resident membership, and Dr. E. W. Ewell, Lancaster, N.Y., for nonresident membership. They were separately balloted for and elected Fellows of the Academy.

The secretary read a report from the Council, to whom was referred the revision of the constitution and by-laws, giving the proposed changes which will be acted on at the next quarterly meeting. The section of medicine provided the following program: Clinical quantative estimation of proteid digestion in the stomach with demonstrations, Dr. A. L. Benedict.

Attendance, 21. Adjourned at 10.30 p.m.

Section on Surgery, September 4, 1900.

REPORTED BY FREDERICK H. MILLENER, M. D., Secretary.

The first regular meeting of this section for the season of 1900 and 1901, was held on September 4, 1900, twenty-eight Fellows being present.

Dr. MARSHALL CLINTON in the chair. The minutes of the previous meeting were read and approved.

The essayists of the evening were Drs. Vertner Kenerson and Herman Mynter.

Dr. VERTNER KENERSON read a paper entitled, Lymphangioma, in which he reported two cases, both occurring in infants said to have appeared shortly after birth; in one case the left side of the face was involved, and in the other the right shoulder. In both cases the operation was performed with fatal results from shock; the hemorrhage in both cases was comparatively small.

In the second case elaborate preparations were made for supplying the child with normal salt solution to prevent shock and to supply a substitute for the lymph which was lost in the previous case. The tumors were dingy blue in color, firm, not fluctuating, firmly adherent, no pulsation, no points of tenderness.

The affliction in these cases is great, the children are really monstrosities, the tumors increase with age and the individuals are not able to secure ordinary employment. Microscopic examinations showed that the skin and lymph spaces were involved and connected with deep lymphatics of the trunk; drawings and photographs were presented. The condition was suggested as being caused by congenital or acquired occlusion of the efferent trunk of a set of lymphatics which supply a particular part. He believes these cases to be operative, if done early and with proper precautions.

DISCUSSION.

Dr. **Eugene Smith** thought that fatality in the second case might be due to a possible toxic effect of salt solution, as very little blood had been lost and therefore no solution required.

Dr. **Herman Mynter** described a case of traumatic origin.

Dr. **Chauncey P. Smith** also thought the salt solution in this case toxic and described parallel cases.

Dr. **Herman Mynter** presented several very interesting cases of joint resection and described the pathology of lesions causing the same.

Meeting adjourned at 10.05.

Progress in Medical Science.

GENITO-URINARY AND SYPHILITIC DISEASES.

Conducted by BYRON H. DAGGETT, M. D., Buffalo, N. Y.

NOTE ON THE FREQUENCY OF RENAL CASTS WITHOUT ALBUMINURIA.

MARTIN and JONES at a clinic at Victoria Hospital, Montreal, (*Philadelphia Med. Jour.*, September 8, 1900,) demonstrated that the presence of casts in urine without albumin is not uncommon. This condition is usually associated with acute poisoning, alcoholism, icterus, arteriosclerosis, pernicious fever and convalescence from acute nephritis.

Eichorst and Senator say that casts without albumin is very uncommon. Purdy states that he has never found casts without albumin at some period during the course of the malady. Various other observers note conditions in which casts are found without the presence of albumin. Von Jaksch notes the frequency of hyalin casts in urine otherwise normal. He states also that casts of any other variety are extremely uncommon without albumin. Martin and Jones tabulate a series of examinations made at the Royal Victoria Hospital, and allege that under all conditions the same specimen of urine which showed absence of albumin may frequently contain casts, hyaline, epithelial and granular. The subjoined statistical table "seems to illustrate the frequency with which casts may be found in the urine when albumin is absent.

"Under such conditions, then, it would seem difficult to estimate the true importance of casts in the urine, while it cannot but be believed that their occasional occurrence is devoid of the gravity in prognosis usually associated with their presence—*i.e.*, without other significant symptoms. This applies, at all events to the hyaline and granular varieties; the epithelial casts, on the other hand, being more uncommon, and doubtless of more serious import.

"Glancing over the conditions in which our few observations have been made, one is, perhaps, struck with the suggestion that irritating conditions are, after all, the main causes associated with the presence of renal casts—*i. e.*, just as bile acts as an irritant to the renal cells, so, too, would toxins, as they may occur in tuberculosis, pneumonia, typhoid fever, sepsis, etc., act similarly and render the cells of the kidneys incapable of performing their proper functions. Further observations will be necessary to give satisfactory evidence as to the more common causes of renal cast-formation. That their presence, however, without albumin, is more frequent than is usually believed, seems evident from the examinations of patients, as given above."

PROSTATIC CALCULUS.

J. C. SPENCER (*Philadelphia Med. Jour.*, September 8, 1900,) says prostatic calculi are divided into two classes: essential and adventitious or exotic. The former has its origin in the gland substance, the other originates outside of the glandular panenchyma. The composition of the essential differs chemically and morphologically from the adventitious form.

The essential variety was first observed by Morgagni, who likened these concretions to "small grains of snuff." Virchow made investigations regarding their nature in 1881. Iversein, in 1871, made a study of the nature and origin of these minute bodies. He says that the pigment in certain epithelial cells becomes freed from the cell-envelope and permeates the glandular parenchyma. These, then, become a nucleus about which concentric homogeneous layers form, of a substance which gives an amyloid reaction.

Stilling says that degenerated protoplasm of gland epithelium is the nidus of these concretions. About these granules colloid material forms, degenerates and responds to the iodin reaction. These granules are only found in adult life, that is, they do not form concretions in childhood or early manhood, as they are usually expelled through the acini and duct by muscular contraction, but result in the formation of a hyaline substance.

Posner, in 1889, said that this substance is the result of coagulation of fluid albumin or its saturation with lecithin.

Eastman and Hildebrand believe that amyloid matter is present in prostatic concretions.

It would seem fair to conclude from these observations that prostatic calculi originate in the protoplasm of degenerated gland epithelia about which colloid material collects and degenerates, then various mineral salts accrete. If uric acid, ammonio-magnesium, phosphate or calcium oxalate are present it indicates connection with the urinary passages, as these are urinary salts. Prostatic calculi vary in size from 1-200 of an inch to an orange. Large sizes result from accretion of urinary salts. The essential calculi are sphenoidal, smooth, hard and smaller in size.

The diagnosis depends to some extent upon the symptoms and size. The small ones make no symptoms, even those of good size often produce no subjective symptoms. The objective symptoms are hardness upon rectal palpation and urinary obstruction. If the calculus has eroded through into the urethra, it may be detected by the sound. If the calculi are multiple and in contact crepitus may be induced by palpation. Tuberculous nodules may be mistaken for calculi.

Virchow in his *Archives*, II., 9, describes the presence of calculi in the female prostate; the existence of such an organ has been described by Leukart. They are found in the acini and crypts, surrounded by epithelia; soft externally, internally more dense, brown in color and formed in layers.

Friedel found them in the gland of a man dead at 52 years of age. Cutting into the prostate he found grit, many crystals of phosphate of lime.

Paulicki found 240 calculi, size of grains of barley, in the prostate of a man 73 years old.

Edward Morris reports that he found five calculi, weighing five grams, in the middle lobe of the prostate.

G. Gross reports finding urethro-prostatic calculi, weighing 67 grams.

Van Thorlen removed a prostatic calculus, weighing forty grams, by cutting through the anterior rectal wall. This calculus had a uric acid nucleus, with a calcium carbonate envelope, hence it must have been of extraprostatic origin.

Hottute removed two small and one large (150 grams) calculi from a patient forty-five years of age. Their nuclei indicate extra-prostatic origin. During the past fifty years many others have reported cases of prostatic calculi, either essential or adventitious.

The abstractor removed a calculus from the prostate of a man 68 years old, at the Sisters Hospital, June, 1899. This calculus was imbedded apparently in the prostatic urticle. It was the shape, and the size of a lima bean, hard, light-gray in color, and smooth. He gave a history of several years of serious urinary disturbance. He had had a perineal section four years before without relief. Calculus was not diagnosticated until a perineal opening was made into the membranous urethra, when the stone was detected by the finger. It is comparatively within recent times that there has been authentic recognition of this condition.

BOTTINI'S OPERATION.

Freeman (*Denver Medical Times*, October, 1899,) sums up the advantages of the operation as follows:

1. There is no mutilation and no external wound, the manipulations being carried out through the urethra.
2. A general anesthetic, so dangerous in the old and debilitated, is not often necessary, local anesthesia being usually sufficient.
3. There is very little hemorrhage, the vessels being sealed by cauterisation.
4. There is comparatively small danger of serious infection and usually but moderate rise in temperature, the wounds being necessarily aseptic. The charred surfaces tend to prevent absorption until granulations appear.

5. In most instances patients may sit up and even walk about in a few days, which is of great advantage in those who are old and feeble.

6. The effects may be almost immediate, more or less urine being voided within a few hours, where it was previously impossible to pass a drop.

7. But few relapses have been observed; in fact, improvement has a tendency to be progressive.

8. The operation may be repeated, if for any reason the attempt has been unsatisfactory.

9. The mortality is lower than with other effective measures.

10. Patients will avail themselves of this method of treatment when they will refuse to submit to castration, prostatectomy, etc.

THERAPEUTIC NOTES.

CONDUCTED BY NELSON W. WILSON, M. D., Buffalo, N. Y.

PNEUMONIA.

DR. J. A. GRACEY, in the *Charlotte Med. Jour.*, reports creosote carbonate (creosotal) of great value in pneumonia in all stages, as well as in acute bronchitis. He got fairly good results from drop doses of beechwood creosote every two hours, but prefers creosotal because it can be given in fuller doses, is more palatable and agrees better with the stomach. Of creosotal he gave 10 to 15 minims in a simple menstruum, every two or three hours.

Dr. Charles F. Stokes, U. S. Navy, reported to the Medical Society of Kings County, several cases of pneumonia covering all stages in which creosote was administered in twelve drop doses in capsules, every two hours, with most favorable results.

To prevent its separation in solutions, creosotal should be dispensed in the following combination, according to Munk (*Pharm. Central-halle*):

℞	Creosotal	1 to 3.0
	Emulsionis oleosæ	80.0
	Syrup, althaeæ	āā 100.0

Add the creosotal to the emulsion before the addition of the water.

NEW LOCAL ANESTHETIC FOR THE EAR.

AQUEOUS solution of cocaine and eucaine having proved so unsatisfactory when applied to the tympanic membrane as anesthetics, the use of aniline oil and alcohol as vehicles, as first tried by Albert A. Gray, should prove a boon to aurist and patient, as paracentesis is stated to be entirely painless five minutes after the anesthetic is employed. Ten drops of the following preparation are injected into the external auditory canal and allowed to flow to the membrane:

℞	Hydrochlorate of cocaine	5 parts.
	Dilute alcohol	50 "
	Aniline oil	50 "

Granulations of the tympanum can also be removed painlessly, first cleansing and drying the parts before using the solution. In case of thickened and hardened membranes the following formula is more effective:

℞	Hydrochlorate of cocaine	10 parts.
	Absolute alcohol	30 "
	Aniline oil	70 "

—*Medical News.*

TRIONAL MIXTURE.

THE *Jour. Am. Med. Association* credits the following to M. A. H. Thelberg, of New York:

"One of the objections to trional is its difficulty of solution and also its unpleasantness of administration when given in the usual method. The following will be found an excellent method of making a palatable mixture:

℞	Trional	ʒij.	8.00
	Ol. amygdal. dulc.	℥j.	32.00
	Gum acac.	ʒiv.	16.00
	Syrup tolutan	℥j	32.00
	Aquæ aurant. concent.	ʒiv.	16.00
	Aquæ pur., q. s. ad.	℥iv.	128.00

M. Ft. emulsion. In divided doses.

"Given in this way the hypnotic effect is as pronounced, and far more readily obtained than in the present method of administering the drug."

TOPICAL APPLICATION FOR BURNS.

AFTER having washed the part with boric solution and having evacuated the blisters, if there are any, apply with the aid of a brush the following solution:

℞	Tannin	ʒiiss.	10.00
	Alcohol	ʒiiss.	10.00
	Sulphuric ether	℥iiss.	80.00

M. External use.

—*Bull. gen. de Therapeutique.*

SODIUM PHOSPHATE IN URTICARIA.

WOLFF gives the phosphate of soda internally, every three hours, in doses of sixty to seventy-five grains, or less in infants, to cure urticaria within the space of twenty-four hours. Locally he prescribes at the same time, as a lotion, a mixture often employed in America for eczema:

℞	Calamine prep. Zinc oxidi . .	āā ʒiss.	6.00
	Ac. carbolici	ʒss.	2.00
	Aquæ calcis	ʒxv.	60.00
	Aquæ rosæ	℥ivss.	144.00
M.			

In infants the quantity of carbolic acid ought to be reduced according to age. In chronic urticaria the phosphate of soda taken after each meal in the dose mentioned causes uniformly a rapid relief, but relapses often occur; indeed, the patients ought to continue the use of this drug until the tendency to relapse has entirely disappeared. Sodium phosphate is particularly efficacious in urticaria of a gastro-intestinal origin, which is often the case.—*Medical News.*

TOBACCO HEART.

FOR that very prevalent condition known as tobacco heart, Stern recommends the following combination:

℞	Adonidin	gr. $\frac{1}{12}$.	.005
	Ammonii carb.	gr. ii.	.125
	Camphoræ	gr. ss.	.03
S.—t. i. d.			

—*Merck's Archives.*

SIMPLE CONJUNCTIVITIS.

In acute cases Ohlemann advises cold compresses and one of these lotions:

℞	Zinci sulphat.	gr. $\frac{2}{5}$	.026
	Aquæ dest.	ʒiv.	16.00

℞	Plumbi acetat. neutralis	gr. $\frac{1}{5}$	.013
	Aquæ dest.	ʒiiss.	10.00

In chronic cases in which the epithelium of the cornea is intact, 6 to 10 drops of a 15 per cent. solution of lead water in a wineglass full of boiled water should be applied on compresses to the eye two or three times a day for fifteen minutes at a time. The following ointment is very efficacious:

℞	Hydrargyri oxidi flav.	gr. iii.	.195
	Vaselini	ʒiiss.	10.00

When additional redness of the edge of the lids is present, washes are sometimes not well borne. In such cases the following ointment should be used at night:

℞	Hydrargyri precip. alb.	gr. iii.—iv.	.195—.260
	Zinci oxidi alb.	gr. iv.—viiss.	.260—.500
	Aceti plumbi	gtt. iv.—vi.	.260—.390
	Vaselini	ʒvi.	24.00

In chronic cases of an eczematous nature this ointment is useful:

℞	Icthyol	gr. $\frac{3}{10}$—$\frac{7}{10}$	.019—.045
	Amylis.		
	Zinci oxidi āā	ʒiiss.	10.00
	Vaselini	ʒvi.—gr. xxv.	25.66

IRRITATING COUGH OF PHTHISIS.

When not accompanied by much expectoration, the following mixture is recommended:

℞	Codeinæ	gr. iv.	.26
	Acid hydrochlorici dil.	ʒss.	2.00
	Sp. chloroformi	ʒiss.	6.00
	Syr. limonis	℥i.	32.00
	Aquæ dest. q. s. ad.	℥iv.	128.00

M.—Ft. emulsio. Sig.—One teaspoonful at short intervals when cough is troublesome.—MURRELL.

ACUTE CYSTITIS.

Goodell, in the *Dominion Medical Monthly*, speaks very highly of the following prescription in the treatment of acute cystitis:

℞	Atropiæ sulf.	gr. i.	.065
	Acid acetici	gtt. xx.	1.33
	Alcoholis.		
	Aquæ āā	℥ss.	16.00

M. Sig.—Four drops in water before each meal.

CROUP.

Joseph Holt, of New Orleans, suggested the following treatment of croup, and it has been personally prescribed many times with the happiest results:

℞	Chloralis	gr. lxxv.	5.00
	Potassii bromid	gr. xlv.	3.00
	Amonii bromid	gr. xxx.	2.00
	Aqua cinnamon	℥ii.	64.00

M. Sig.—Teaspoonful and repeat in twenty minutes if not relieved.

"This is intended for a child about 5 years old. For younger children the dose is diminished. The chloral relieves the spasm of the larynx and the bromids allay the nervousness; so that the little patient is soon asleep, and wakes the next morning as well as usual. The first dose generally gives relief."

CONSTIPATION IN CHILDREN.

A most effective remedy is the following:

℞	Pulv. rhei	gr. xxiiss.	1.50
	Pulv. ipecac	gr. iv.	.25
	Sodii bicarb.	gr. lx.	4.00
	Syr. simp.	℥iv.	128.00

M. Sig.—Teaspoonful every three hours.

ACUTE GASTRITIS.

Dr. Pepper's treatment for the vomiting of acute gastritis was one of the following prescriptions:

℞	Hydrarg. chlor. mite	gr. i.	.065
	Bismuth subnitrat.	gr. xxxvi.	2.39

M.—Ft. powders xii. Sig.—Take one powder dry upon the tongue every three hours until four or five have been taken.

℞	Acid carbolic	gtt. iv.	.26
	Sodii bicarb.	ʒiss.	6.00
	Elix. aurant.	℥ss.	16.00
	Aquæ q. s. ad.	℥iv.	128.00

M. Sig.—A teaspoonful every three hours.

GONORRHEA, INTRAURETHRAL INJECTION.

Pousson reports favorable results from the use of the following, the formula being based on the principle that a mixture of several antiseptics exhibits more energetic therapeutic action than any single one of the same even in strong solution:

℞	Menthol	gr. ⅓	.022
	Acidi salicylici	gr. iss.	.100
	Acidi carbolici Acidi lactici Ol. eucalypti Methyl salicylatis } āā	gr. iii.	.200
	Resorcin	gr. viii.	.520
	Aq. dest.	℥iii.	96.00

M. Sig.—External use.

DYSMENORRHEA.

℞ Ergotin	gr. xv.	1.00
Quinine sulphat.	gr. iii.	.20
Pulv. digitalis fal.	gr. iss.	.10
Pulv. coca, q. s.		

M.—For ten pills. Sig.—Three to five may be taken daily.

—*Presse Medicale.*

NEUROLOGY.

CONDUCTED BY WILLIAM C. KRAUSS, M. D., Buffalo, N. Y.

AT THE thirteenth International Medical Congress, held at Paris, August 2-9, 1900, the section on neurology presented a very excellent program. Some of the papers read are abstracted as follows:

THE NON-TABETIC LESIONS OF THE POSTERIOR COLUMNS.

By M. BRUCE, M. D., Edinburgh, Eng.

The subject was discussed in two sections: I. Anatomical. II. Pathological.

I. The constitution of the posterior columns, as shown by degenerations following: (1) lesions of nerve roots; (2) lesions of the cord itself, interrupting the continuity of the posterior columns; (3) lesions of the gray matter.

Exogenous Tracts.— Differentiation of Goll's and Burdach's columns depends on termination of their long fibers in the nucleus gracilis and nucleus cuneatus respectively. Burdach's column commences at fifth dorsal segment. Goll's column as a definite and characteristic form at each segment, any departure from which indicates a partial involvement of its components. Kahler's law regarding the positions of the exogenous fibers in the columns are generally true, but requires some modification for the cervical and dorsal regions. It is applicable to descending branches of the roots also. The relative position of ascending fibers of roots, as far as known, will be considered. Descending exogenous fibers in the cervico-dorsal region occupy the position of the comma tract of Schultze in part of their course. The descending root fibers from lower dorsal, lumbar and sacral roots enter the septo-marginal tract in part.

Endogenous Tracts.—Cornu-commissural zone of Marie, comma tract of Schultze, septo-marginal tract (including the oval field of Flechsig and the triangular area of Gombault and Philippe), the descending tract of Hoche, and the postero-internal root-zone of Flechsig will be considered. It will be shown that they are not purely endogenous but contain exogenous fibers also. The endogenous fibers of the cornu-commissural zone are short and degenerate upwards. Those of the comma tract degenerate downwards for several segments. Those of the septo-marginal tract are derived from segments as high as the eighth cervical and degenerate downwards. The postero-internal root-zone is mainly composed of root fibers of indeterminate length which enter it horizontally in the sacral and dorsal regions and in the lumbar and cervical regions pass obliquely upwards into it.

The areas of Flechsig will be considered.

II. The pathological changes in the posterior columns considerd in relation to the diseases which involve them.

a. Progressive muscular atrophy of the Charcot—Marie type. Sclerosis in posterior columns throughout the cord (with the exception of the sacral region); involving the columns of Burdach, and to a lesser extent the columns of Goll; leaving a healthy zone along the posterior commissure and posterior cornu, and partially also in the postero-internal root-zone. Lissauer's tract generally involved in the sclerosis. Posterior roots degenerated.

b. Cerebral tumors frequently produce degenerations in the posterior columns, sometimes interpreted as due to retrograde degeneration from the nuclei of the columns. These are probably due to ascending degenerations of one or more roots which have been injured at the point of their entrance in the cord, either through tension produced in the leptomeninges by accumulation of cerebro-spinal fluid or by the action of toxins on the vulnerable point of Redlich and Obersteiner.

c. Syringomyelia.—Affected areas are: (1) behind the posterior commissure, (2) along the posterior median septum, (3) a narrow strip between Goll and Burdach's columns. The lesions are probably due to a direct extension from the gray matter, and not to secondary degeneration from involvement of trophic centers within the gray matter. Destruction of these areas, however, may produce secondary degeneration.

d. Friedreich's ataxia.—The lesion is a sclerosis in the posterior and antero-lateral columns. So far as the posterior columns are concerned, this sclerosis is most marked in the lower dorsal regions and diminishes upwards and downwards; being practically absent in the sacral region, and ceasing entirely at the nuclei of the posterior columns. The sclerosis presents an exuberant growth of neuroglia usually arranged in whorls and in interlacing fasciculi. It involves the greater part of the column with the partial exception of the cornu commissural and the septo-marginal tracts. The pia-mater is usually normal and the vessels show slight or no thickening. The posterior roots show a similar change with various stages of attenuation and demyelinisation of their fibers. Change in the sensory peripheral nerves and atrophy of the posterior root ganglia suggest that the nature of the process is a primarily imperfect development of the sensory neuron with subsequent degeneration, and secondary increase of neuroglia.

e. Combined sclerosis of the posterior and antero-lateral columns —The term includes several groups of diseases which agree in the simultaneous degenerations and sclerosis of these columns (these changes being not, however, accurately limited to definite systems), but which differ from each other in their clinical course and in their etiology. The most important diseases are pellagra, ataxic paraplegia (Gowers) or ataxo-paraplegic tabes (Déjèrine) combined system degeneration of German authors, the combined degeneration in grave anemia, subacute combined degeneration recently described in England, etc. It is certain that all these titles do not indicate distinct morbid entities.

In pellagra, the sclerosis, according to Tuczek, affects chiefly the column of Goll and the middle root-zone, and spares relatively the cornu-commissural and the septo-marginal tracts. The roots, according to Tuczek, are healthy; according to Babes, they are degenerated. Both these observers regard the sclerosis as the result of the destruction of the nerve fibers by the direct action of some toxins. It has also been regarded as secondary to a degeneration of the endogenous fibers, due to vascular changes in the gray matter.

In ataxic paraplegia the lesions resemble those of subacute combined degeneration, but the disease differs from the latter in its much more prolonged course.

The degeneration of the columns in grave anemia seem to be the same as those described by Rothmann as combined system-disease and by Russel, Collier and Batten, as subacute combined degeneration. The lesion is most marked in dorsal and cervical region. It affects mainly the middle root-zone in the lumbar region, and in the cervical and dorsal, chiefly Goll's columns. The area near the posterior commissure and the posterior cornu, and, in the lumbar region, that next the septum, are spared. The fact that the degeneration spreads round the periphery of the cord irrespective of systems and that the posterior roots are spared and the membranes healthy, indicate a vascular origin to the process which is probably of toxic nature. In anemic cases the cord change is probably not the result of the anemia but due to its cause.

THE DIFFERENTIAL DIAGNOSIS OF ORGANIC AND HYSTERICAL HEMIPLEGIA.

By DAVID FERRIER, M. D., London, Eng.

Hysterical hemiplegia may simulate hemiplegia due to organic cerebral disease, and there is scarcely a single symptom uniformly present sufficient of itself to enable one, off hand, to differentiate the one from the other.

A correct diagnosis is, however, in most cases possible, and this depends on a consideration of several factors, of which the more important are the following:

(1) The personal and family history; (2) the mode of onset; (3) the characters of the paralysis; (4) the course and termination; (5) the state of the superficial and deep reflexes.

a. The personal and family history.

Hysterical hemiplegia, like organic hemiplegia, may occur at all ages. The subjects of hysterical hemiplegia are individuals, male and female, of neurotic inheritance, and of the so-called hysterical temperament, and who have either been previously liable to hysterical attacks, or exhibit some of the permanent stigmata of hysteria, such as zones of hyperesthesia, or anesthesia or complete sensitivo-sensorial hemianesthesia of the recognised type (Charcot.)

The subjects of organic hemiplegia are (apart from traumatism, or autochthonous intracranial lesions) those predisposed by vascular, renal, or cardiac disease to cerebral hemorrhage, embolism or thrombosis, of the existence of which it is generally possible to obtain evidence by careful clinical investigation.

b. The mode of onset.

Hysterical hemiplegia occurs most commonly after some great nervous disturbance, such as emotional shock, or after an epileptiform or apoplectiform attack (so-called hysterical apoplexy) simulating cerebral hemorrhage. But hysterical apoplexy is probably only a phase of the grand hysterical attack, and differs from true apoplexy *inter alia* in the absence of disturbance of the circulation, respiration and temperature.

c. The characters of the paralysis.

In hysterical hemiplegia, the upper and lower extremity may be more or less completely powerless and flaccid, but the face is rarely so. Such affection of the face as occurs, is usually of the labioglossal spasmodic type (Charcot) on the same or opposite side. The leg is usually more affected than the arm, and in walking the paralysed leg is dragged like an inert mass, and not circumducted as in organic hemiplegia (Todd's symptom).

In the majority of cases hysterical hemiplegia is associated with complete sensitivo-sensorial hemianesthesia. In organic hemiplegia, accompanied by hemianesthesia from lesion involving the sensory tracts of the internal capsule, the loss of sensation is rarely profound, the special senses of hearing, smell and taste are rarely impaired together, and when vision is affected it is usually in the form of hemianopsy, and not of crossed amblyopia with concentric contraction of the visual fields as in hysteria.

Hysterical monoplegia not infrequently follows local traumatism after a longer or shorter interval (Charcot), and differs from cortical monoplegia in its absolute restriction to one limb, or one segment of this limb, and in the association of the motor paralysis with anesthesia, which is morphological in character (Charcot) and does not correspond to the peripheral distribution of any sensory nerve, or posterior root of a spinal segment.

d. Course and termination.

Hysterical hemiplegia (monoplegia) may last an indefinite time, and continue of the same flaccid character throughout. In organic hemiplegia of more than three months duration, late rigidity or contracture occurs in the paralysed limbs, and gives place only to muscular atrophy. This contracture sets in gradually, and never develops suddenly as in hysteria.

Hysterical hemiplegia is liable to great variations, and may at any time suddenly cease.

e The state of the superficial and deep reflexes.

In hysterical hemiplegia the deep reflexes are not necessarily altered, and true ankle clonus is rare; whereas in organic hemiplegia the deep reflexes become unavoidably exaggerated, and ankle clonus is the rule.

In hysterical hemiplegia, the plantar reflex is usually absent or difficult to obtain. If it can be elicited, it is of the normal "flexor" type. In organic hemiplegia (and in all lesions of the pyramidal tracts) the plantar reflex is of the "extensor" type (Babinski's symptom: phénomène des orteils).

NATURE OF TENDONS-REFLEXES.

By C. H. SHERRINGTON, M. D., Liverpool, Eng.

Two distinct sets of phenomena are included under this name:

1. True spinal and spino-cerebral reflexes from tendons.
2. Pseudo-reflexes commonly known as tendon phenomena or by British and American writers as "jerks."

The former, *i. e.*, No. 1, are easy of explanation. The tendons of muscles, long ago recognised by Bichat as capable of affecting sensation, contain the end-organs of afferent nerves. These are the end organs described by Golgi, by Ruffini and others. These organs can be excited by mechanical means, probably mechanical strain is the stimulus which is their normal and adequate mode of excitation.

The true tendon reflexes are not so much importance to clinical medicine as are the pseudo-reflexes (tendon-phenomena, "jerks.")

The latter, *i. e.*, No. 2, are typified by the "knee-jerk." An objection to calling them "tendon-phenomena" is that the tendon is not essential to the phenomenon. That they are not true reflex is shown by the time of the latency of the reaction being so brief as to exclude the possibility of reaction through a nerve-center. The "jerk" is a direct response by the muscle to sudden mechanical strain. It is only when the excitability of the muscle is great that this direct response can be elicited from it. When the muscle is cut off from the spinal motor neurons which innervate it, its excitability falls too low for the response to be possible. When the afferent spinal roots connected with the spinal tonus of the muscle are severed the excitability of the muscles also falls too low for the direct response to sudden mechanical strain. There is therefore necessary for the "jerk" the maintenance of the spinal tonus of the muscle. The reflex arc on which the spinal tonus of the muscle depends is composed of the afferent nerve-fibers coming from the muscle (*vasto crureus*, in the fall of the "knee-jerk") itself, and of the motor neurons innervating that muscle. The activity of that reflex arc can be exalted or inhibited by the activity of various other spinal and spino-cerebral arcs. Removal of the cerebral hemispheres leads immediately to very great exaltation of the tonus of the *vasto-crureus* muscle traceable to exalted activity of spinal motor neurons innervating that muscle. The knee-jerk is then much exalted so that a rhythmic series of jerks may follow a single tap on the patellar tendon.

On the other hand, the activity of spinal motor neurons innervating the *vasto-crureus* may be depressed by exciting activity of the motor neurons which innervate the antagonistic muscles, the flexor muscles of the knee. The activity of these motor neurons of the flexors of the knee is habitually associated with some degree of inhibition of the extensor muscles of the knee. The most easy spinal reflex to obtain in the hind limbs by excitation of the limb itself is flexion of the limb at knee and at hip. Hence an easy way of causing inhibition of the knee jerk is to excite a reflex movement of the hind limb from some portion of the limb because the flexors of the knee are brought into play and the activity of the motor cell of the extensors is then partly or completely inhibited. The inhibition can be peculiarly obtained by stimulating the flexor muscles themselves, *e. g.*, semi-membranosus.

THE NON-TABETIC LESIONS OF THE POSTERIOR COLUMNS OF THE SPINAL CORD.

By CHARLES L. DANA, M. D., New York.

The posterior columns of the spinal cord and the posterior spinal roots, so far as diseases may be concerned, are studied from three points of view:

1. Diseases in connection with the embryological areas.
2. Diseases in connection with the exogenous and endogenous fibers.
3. Diseases connected the vascular supply.

The writer gives a brief review of the non-tabetic lesions. He then discusses the subject of acute ataxia due to spinal lesions, *acute spinal ataxia*. He gives the observations of Leyden and others as to acute ataxia due to bulbar lesions and describes a distinct class of cases due to acute lesions of the posterior columns of the cord. These occur in elderly or aged people with generally a specific history. Personal cases are reported and literature referred to. He gives his views as to the pathology of the disease.

The writer next discusses the subject of lesions of the posterior columns due to cachectic, anemic and infectious states. He describes the condition which he calls "subacute spinal ataxia," due to lesions of the posterior, and often of the lateral columns. The etiology, course and pathology of this disorder is described from the personal experience of the writer, based upon a study of sixteen cases of his own, in three of which there were autopsies.

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PHYSICIANS AS SPEAKERS.

THE multiplication of medical societies, general and special, has developed a speaking capacity of late among physicians that formerly was quite unknown. Papers are read that are to be printed and these must be discussed and the discussions published if the value of the contribution is to be developed into its greatest usefulness. Physicians are, speaking generally, but indifferent debaters, hence the pith and kernel of their remarks often fail of their intended effect. No one is more cognizant of the imperfections of physicians as speakers than the medical reporter who is brought face to face with the facts.

Mr. William Whitford, of Chicago, writes on this subject in the *Jour. of the American Medical Association*, September 22, 1900. He offers many suggestions of value and interest to physicians in regard to public speaking, which all who participate in medical discussions will do well to heed. As Mr. Whitford is the official stenographer for the American Medical Association, and of several state and special medical societies, his article is based on an extensive and varied experience in reporting the utterances of doctors. He says that the communication of thoughts by means of spoken language is an art that cannot be acquired to any great degree of perfection except by long and continued practice. However distinct may be a physician's voice, however vivid his conceptions, he is often conscious that the phraseology at his command, particularly in public speaking, is inadequate to do them justice. He seeks in vain the words he needs, and strives ineffectually to devise forms of expression which shall faithfully portray his thought.

The pitch, intensity and amplitude of a speaker's voice have much to do with the work of the reporter, in that they will either greatly expedite his work or render it extremely difficult. A physician, in addressing a convention in a large hall, may pitch his voice so low that perhaps only one-half of the members can hear distinctly what he says, and it is largely guess work for the other half to grasp his meaning. The acoustics of a hall may be perfect, but if the speaker's voice is improperly pitched, he will be imperfectly heard; and, in such instances, incorrectly reported. The physician who takes cognisance of acoustics and pitches his voice in the proper key, if he articulates well, can be heard in the remotest nook or corner of a large convention hall without apparently any unusual effort. A clear, distinct, far-reaching voice is undoubtedly a natural gift, although physicians, as speakers, can do much by training to acquire an agreeable tone. In reporting loud, excitable speakers the stenographer meets with difficulty at times in catching the exact words on account of deficient enunciation on the part of the speaker or muffled syllables. Bright, Gladstone, Phillips, Clay and other great orators understood the secret of how to pitch the voice so as to make it audible to everybody in a large hall. If the acoustic properties of a hall are good, the voice pitched in the right key will carry; if those properties are bad, the shouted words will be heard no better than if they were whispered.

A medium pitch should be the basis of speech. From it one may rise or fall, according to intellectual and emotional requirements. Height and depth are necessary. Beecher said, "What a speaker most needs is to strengthen his ordinary conversational voice, without giving it a hard, firm quality, that is, without destroying its flexibility and power of adaptation to every mood." It is a fine art to be able to lower one's pitch. Some scream on to the end during an animated discussion stopping from sheer exhaustion; others spasmodically fall to a low note, but immediately forget themselves and run up to the same pitch, vociferating till out of breath.

The acoustic properties of most auditoriums are imperfect; but these defects generally have a physical cause which admits of being guarded against by the adaptation of the speaker's position and tone. Monotony of a low-pitched voice exerts a sporific influence over an audience, which no strength of thought nor beauty of language can wholly counteract and, if there be regularly recurring minor notes, the most startling expressions lose their power. Even to those who do not sleep the sounds bear no sense.

The prime object of a speaker should be to make himself understood, and to this end sense should never be sacrificed to sound. A speaker should never use more force than necessary. If requested to speak louder, he should beware of raising the pitch of his voice; by a slight increase of volume on the same key he can make anyone, whose organs of hearing are not defective, hear distinctly. The groundwork of good speaking is the tone of lively conversation. The essence of distinctness is a clear, crisp articulation. With some speakers the vowels absolutely drown the consonants, which have thus no opportunity of asserting themselves, and the result is that the hearers have but a vague conception of the words that are uttered.

Continuing he says of delivery that the first duty of a physician in addressing an audience is to make himself heard. If he speaks very rapidly his hearers will miss words here and there, and he fails to produce the effect intended. The speaker should be full of his subject and impressed with its importance. He should speak deliberately, enunciate distinctly, and in a natural voice. He should express his thoughts with clearness and force. His peroration should be sharp, a clear summary of established propositions, forced home perhaps by an impressive illustration.

Mr. Whitford further says that one of the facts disclosed by reporting physicians for the last sixteen years, is the marked tendency towards greater simplicity of expression. Involved sentences and the use of big words to say little things are not tolerated as they once were. Conciseness and condensation, as elements of style, have largely taken the place of classicism. It is not so much stateliness as incisiveness that is sought. The axiom of the modern speaker appears to be that to talk effectively one must speak tersely.

A common error among young physicians, in discussing papers read before medical societies, is a tendency to diffuseness, which may be defined as a copious use of words so arranged as to create the suspicion that a thought is somewhere concealed among them. The youthful physician in debate feels it necessary to describe ordinary things in an extraordinary way, and strives to dignify commonplace thoughts by clothing them in fulsome rhetoric. The result is a painful incongruity between the thoughts and their apparel. For instance, a young physician instead of saying that a man was thrown sideways from his carriage, breaking his leg and putting his ankle out of joint, said that "the patient was projected transversely from his vehicle, fracturing the tibia and fibula and luxating the tibio-tarsal articulation." Mr. Whitford gives several additional examples. No one is better situated to note the disastrous effect of the inapt and ineffective use of words than the reporter. Pope expressed the matter in a few words when he said:

> "Words are like leaves, and where they most abound,
> Much fruit of sense beneath is rarely found."

The first principle of strong oral composition demands the employment of as few words as will clearly express the thought. This rule, carefully followed, will soon eliminate redundancy, circumlocution and all kindred evils that weaken the style of many otherwise good speakers.

As one of the greatest elements of success in good speaking, Mr. Whitford mentions careful and thorough preparation and a clear idea of the subject to be discussed. No physician can expect to sway his hearers unless he is a perfect master of the subject in hand. In growing earnest, impressive, or in reaching for a climax, it is not necessary for a speaker to rant or roar. Much energy is wasted by professors in lecturing to medical students in this way that might be advantageously saved. To be energetic and eloquent, it is not necessary to declaim boisterously.

Physicians and lawyers compared.—The art of speaking well is not confined to statesmen, jurists and clergymen. The medical profession, like the ministerial and legal professions, has orators within its ranks. The experienced physician strives to use the simplest and most expressive words. The author of the paper we are quoting has had the pleasure of reporting the utterances of several eminent lawyers from time to time, and, to speak candidly, he says that they were not the superiors in any sense of many of the physicians whose impromptu speeches he has reported. He mentions two or three striking examples of the extemporaneous type of speakers in the medical profession. Of Dr. Nicholas Senn he says: "He is a fluent, forcible, and impressive speaker. He has an excellent command of language. There is a richness in his diction, a copiousness, ease, and variety in his expression which are rarely surpassed by the best extemporaneous speakers. The arrangement of his sentences in debate seem never to have been studied, yet every word falls into its proper place. He displays his ability as a debater to best advantage when under a heavy fire."

Of Dr. Charles A. L. Reed, of Cincinnati, Ohio, the President of the American Medical Association, he says: "He is a splendid example of the extemporaneous type of speaker. As a debater he is well equipped. He is noted for his elegant diction, his scholarly references, and the ornateness of his phraseology. His well rounded sentences are marvels of construction. No matter how sudden the summons, or what the subject, a speech from him is always interesting. His rhetoric is faultless, his delivery graceful and easy."

He regards Dr. Joseph M. Mathews, of Louisville, as "an easy, graceful, fascinating, polished speaker, whose style is notable for its simplicity. He can adorn any subject."

As examples of good extemporaneous speakers in the medical profession, the author mentions some thirty representative physicians of the East, West, North, and South, and closes his paper with a classification embracing thirty-seven types of speakers—good, bad and indifferent. From this imperfect résumé it will be observed that the article is well worth reading and we hope all participants in medical society work will study it.

A NOISOME STENCH.

THE City of Buffalo has been the sufferer of late from an abuse of privilege that has brought distress to its people and shame to those responsible for it or who caused it. About the middle of August one of the large grain elevators that skirt the harbor —the Dakota—was destroyed by fire, and about 600,000 bushels of wheat and corn were scorched or wet. It became necessary in order to dry this grain to distribute it among the malt houses where facilities were ample for the purpose. The odor that has been given off by this sour grain is indescribable. It is sickening in the extreme; it nauseates the well and prostrates the sick. It disturbs the appetite and destroys sleep. It is a menace to good temper and a disgrace to the civilisation of the period. It has smirched the good name of our fair city and brought dishonor to its municipal administration.

If we were asked to describe the odor that has so completely disrupted the ordinary course of affairs and played such havoc with the amiability of our citizens, we should be compelled to say that it resembled the effluvium of night soil, the stench of rendering works and the tainted atmosphere of the tannery—all combined and each intensified about ten-fold. To live in such an aggregation of stinks for a whole month is enough to send one to a mad house with curses on his lips for the mercenary men who are responsible for this outrage upon common decency.

Visitors to our city have been driven hurriedly away and inhabitants have sought relief in nearby summer resorts, crying in their exodus, Oh! Lord, how long?

That we do not exaggerate the importance of this subject or its effects on our people we quote the following letter addressed to the mayor by one of our most prominent and influential women:

"*To the Mayor of the City of Buffalo:*

"Sir—Three weeks ago an overpowering stench so polluted the atmosphere, that I had recourse at once to the police to learn its cause, and then to the Health Commissioner, to the Corporation Counsel, and to various city officials to ask its abatement.

"The people have complained of it, the papers have denounced it, but we are still not rid of this abomination.

"No portion of our beautiful city is free from its permeating influence, and from the park system to the burned elevators our citizens are suffering, not only mentally but physically, from the foul effects of this decayed vegetable matter, which some are pleased to call 'drying grain!'

"Those in the immediate vicinity of the elevators are the most constant sufferers, and for these, as well as those throughout our city who seem to be unable to speak for themselves, I appeal to you as head of the municipal government to take such steps as shall immediately stop the present outrageous course of proceedings, and put an end to not only a senseless, but to a criminal bickering, which subjects us all to an unwholesome and sickening atmosphere, while a few dollars more or less are being made by a few men at the expense of our city, and its citizens.

"This appeal I make to you as Mayor of the City of Buffalo, and if the names of those for whom I speak will give added weight, I can send you hundreds of those who will be glad to sign them.

"Very respectfully yours,

"MARIA M. LOVE."

"September 6, 1900."

We cannot understand how this deplorable state of things was allowed to proceed from day to day in spite of the protests that were made by newspapers and individuals. It ought not to be possible for such a state of affairs to arise in a well-governed city, and if the advice of Health Commissioner Wende had been heeded a few years ago, we should not have been subjected to such distress, humiliation and disgrace. It will, no doubt, cost the Pan-American Exposition thousands of admissions next year, for we have heard many persons say that it would prevent their attendance and likewise the coming of as many friends as they could influence. It is not easy for a city to rid itself of such a reputation as Buffalo obtained during the mid-summer of 1900. It will prevent people of leisure and means from coming here to reside, or to spend a few weeks in recreation, and in various other ways will retard our progress. It is a piece of provincialism that ought to teach a lesson, even if it is expensive.

The only wonder is that the Mayor did not rise in his might, with all the power at his command, and stamp out the evil when it first appeared. In another place the nuisance is dealt with from another viewpoint.

NATURE RENDERS A VERDICT.

NATURE has rendered a verdict in a suit for damages in an English Court which effectually settled all quibbling between the medico-legal lights who fought back and forth for many days. A woman brought suit against a cable car company alleging severe injury as a result of a car in which she was a passenger running off the track. Physicians who appeared for her testified they had made careful examinations and found that she had a tumor which apparently was growing. There were six physicians who thus testified. The tumor they said was ovarian or uterine—there was some doubt regarding its exact character. The woman's family physician swore that the tumor had grown to be six times as large since the accident as it was before, and that all the pains and aches, and nervous manifestations were directly attributable to the accident. Things looked bad for the company and it was a very nice clean case from the standpoint of the woman's attorneys, who had placed the damages at a high figure, for the woman had sworn that the tumor was caused by the accident; that it did not amount to anything before. The company's surgeon was then sworn. He, too, had made an examination, and he swore that while the woman had a tumor it probably was an ovarian cyst; that the accident had had no effect upon its growth, and that it would have grown just as rapidly and produced the same results if she had not been on the car which ran off the track. All her troubles, he said were caused by the tumor and not the accident.

The case dragged on and on, but finally came to an end, and both sides retired to await a verdict. While waiting, the woman's pains suddenly increased in violence and she was forced to go to bed. Within a few hours after that she gave birth to a full term child. The judicial result of the trial is not stated.

In reviewing the evidence, however, one is struck by the oddity of the whole proceeding. It is quite probable that the company's surgeon discovered the true cause of the tumor and concealed it to prevent a possible new suit for a different cause, knowing that nature would come to the relief of his company before long.

The cable car has been accused of many crimes, but this is by all odds the most bizarre charge which has been laid at its door.

A SOLOMONESQUE COMMAND.

THE Board of Health of East Orange, N. J., has been wrestling for months past with a most momentous question and has finally issued an edict which appears to have met with general approval.

East Orange is one of the prettiest spots in New Jersey, and is quite swell in its way, being populated largely by semi-aristocratic business people from New York and their families.

To live in the Oranges is to have a certain standing among the Jersey commuters, which is envied by the less fortunate individuals who are compelled for domestic reasons to get off at way stations. The population of the Oranges, too, do not carry bundles; their groceries and their other necessities are sent out by express. This explanation will give one an idea of the hauteur of the average resident of the Oranges; and one can the better understand the appalling position in which the East Orange found itself one fair morning in the recent past when complaints began to pour in regarding the noise made by domestic animals quartered in the rear of the palatial summer homes of the aristocratic habitues. Naturally, the Board of Health, made up of sensible-minded gentlemen—some of them undoubtedly had social ambitions—did not wish to openly offend Mrs. Harold Percival Smythe-Jounnes by announcing that the lowing of her cow disturbed the peaceful slumbers of Mrs. Alexander Aristotle Browne-Perkyns; nor did it wish to annoy Mr. Arthur Terwilliger-Terwilliger by ever so delicately calling his attention to Mr. Theodore Tudor's impertinent remonstrance that Mr. Theodore Tudor's beauty sleep was spoiled by the thoughtless kicking of Mr. Terwilliger-Terwilliger's horse.

So this East Orange Board of Health conferred and conferred and suggested and fretted and fumed, and at last a member, who is entitled by virtue of his wisdom to trace his ancestry back to the front door of Solomon's city home, unravelled the tangled social skein by offering a resolution which commanded that all domestic animals be kept quiet between 10 p.m. and 8 a.m.; and that in case of complaint, the animals be removed 200 feet from the complainant's house. Thus was the unruffled surface of society maintained in East Orange, and the beauty sleeps and the "forty-winks" may now be enjoyed in comfort and peace.

The dignity of the East Orange Board of Health has been maintained, but it must be a view for a kinetoscope, the spectacle of the East Orange people keeping their animals quiet between 10 p.m. and 8 a.m.

PUBLIC SPIRIT AND POLITICS.

AFTER many weary days of waiting and discomfort; after many nights of almost unbearable stench, befouling the city, and dooming it in the eyes of casual visitors, the Board of Aldermen passed at the first meeting in September, an ordinance regulating the drying of grain. This is just one more illustration of the type of unmerciful administration under which Buffalo is at present struggling. Not that Buffalo is any worse off regarding its Board of Aldermen than any other city, for boards of aldermen are much alike all over these wide and expansive United States; but it is worse off as regards the local pride exhibited by its city fathers. Not even Chicago, notorious for its corruption, not even New York, infamous for its public waste, would permit the curse of the stench of drying rotten grain which has besmirched Buffalo. Chicago and New York politicians are always on the lookout for the main chance, but they have a certain amount of local pride. They may plunder capitalists and corporations and taxpayers with dispassionate equanimity, but they never overlook local pride, and they have that element of horse-sense which, while it may admit of dirty streets, will not tolerate a stink emanating from every section of the town.

Travelers formed a mighty poor opinion of Buffalo while the grain drying nuisance was in evidence, and left the city believing the odor which assailed their nostrils was an every-day affair. The Board of Aldermen while at fault in the matter for not promptly prohibiting the drying of grain within the city limits, is not alone to blame. It has often been said that some men will do anything for money. That is true in this case at any rate. It would appear to the casual observer that no job would be too foul for the business men of Buffalo who engaged in the highly delectable pursuit of drying rotten grain for a few dollars. Every malt house in Buffalo, with two exceptions, dried the grain and added to the general nausea which the fumes provoked.

Public opinion was wrathful over the outrage, but what good did it do? The newspapers voicing the indignation of their readers protested and threatened. What good did it do? Dr. Wende went to the Board of Aldermen. What good did it do? And, finally, the Board of Aldermen passed an ordinance controlling the drying of damaged grain. What good did it do? What good did anything do? None at all. The maltsters ignored the newspapers, the Aldermen ignored Dr. Wende, and people were made sick. And now, after the drying is completed, the ordinance becomes of force.

Nevertheless, a maltster informed us that there was no money in drying grain. Maybe not; but the grain is dry. The sun has shone, the hay is made, and Buffalo, as usual, got the worst of it all.

ADVERTISING CRIME.

THE article published in the August JOURNAL, concerning the printing by daily newspapers of advertisements of quacks, charlatans, fakirs and abortionists, has attracted general attention on the part of the medical journals, and in some clean newspapers the evil has been commented on and the crusade endorsed.

The Mississippi *Medical Record*, published at Vicksburg, Miss., has begun a similar crusade in the South and attacks the evil with courage and a most refreshing energy.

The editors of the *Record* do not content themselves with merely calling attention to the curse of "medical advertising" in the daily newspaper, but they go beyond that and openly attack the professional abortionist, boldly and fearlessly and denounce the curse in unequivocal terms. In an editorial on the subject, the *Record* says:

> Referring to an editorial, The Criminal Abortionist, in the August issue of the *Record*, the question has been asked the editors if it is not possible to have the license of the criminal abortionist revoked?
>
> There is no law on the statute books of this state authorising the revocation of the license of a doctor for any crime whatever. That such a law ought to exist we have no doubt. In a crime of this kind it would doubtless be much easier to convict where the penalty would be the revoking of license than where it is death or imprisonment for life. While an action revoking the license of a doctor for the act of criminal abortion would not bar an indictment and trial before the courts, it would in a measure restrict the crime of abortion by licensed physicians. . . . .

This method if adopted would be a good move in the right direction; but if the advertising privileges of the fakir and the abortionist were curtailed, they would sooner or later be driven out of business. As it is now there is a public standing invitation in almost every issue of every newspaper published in Buffalo, pointing the way to unfortunate or foolish women, to the slaughter houses where they may be aboited. One advertiser, in fact, has gone so far as to open up a shady "private hospital" in a building with an unsavory reputation, where he performs his operations, and from which he may carry out his dead in daylight. And this man's advertisements are carried into every home in the City of Buffalo where the English afternoon newspapers are read. Thus far, not one Buffalo newspaper has announced the intention of exercising editorial supervision over its advertising columns.

How differently the management of Frank Leslie's Monthly looks at the matter is shown in this editorial statement recently made:

> Advertisements for the cure of the opium, morphine and liquor habit; rupture; teaching of hypnotism, mesmerism and mind cure, and others of the objectionable medical class will be refused admission to our pages.
>
> Any advertisement of any description which we believe is deceptive in its claims, or offensive to good taste, will be declined. It is our purpose to admit only announcements which are thoroughly reliable, and of a clean, desirable character; and to exercise a strict editorial censorship over the advertising pages.

There is still hope that Buffalo newspaper proprietors will reach the conclusion that a lot of honest decency is more desirable than a few questionable dollars.

THE *Philadelphia Medical Journal* in its issue of September 1, 1900, prints the following commentary on code-worship that deserves reading by every physician in the State of New York, not to say every one in the United States. It is a short, incisive paragraph, that groups into a few sentences all there is left of the so-called code controversy in this state. But we need not elucidate; let Dr. Gould speak for himself. These are his words:

> Idolatry in code-worship is a tendency that seems more and more prevalent. One of the most honored and honorable of American physicians recently protested that consultation with sectarians and stealing patients was more prevalent with some code-worshipers (citing the cases of some principal officers of great medical organisations) than with practitioners excluded from the ranks of the faithful. There is, of course, a usefulness in the antiquated code, but we should not forget that zealots aie prone to worship the idol rather

than the spirit it represents. Idolatry may be as bad as or worse than atheism. Certainly there is no reason for pride on the part of the idolaters, who disobey the spirit of ethics in their practice, and who excuse the most outrageous professional scoundrelism if it happens to be exhibited by the code-worshipers. One should set his own household right before lecturing his neighbors. It is a standing disgrace that all reputable regular physicians cannot join our national medical organisation because of a silly war of words. All who love our profession more than their "logic," cliqueism, or vanity, will surely try to find a common meeting-ground and a method of uniting upon essentials.

WHEELING, W. Va., has an epidemic of rabies on its hands, and a city ordinance has been passed and is being enforced requiring that all dogs be confined or muzzled. Thus far, there have been two deaths from rabies. Judging from Buffalo's experience Wheeling has a long, hard fight ahead.

THE New York Board of Health has decided to erect a one-story building near the Willard Parker Hospital, to be used as a bacteriological laboratory solely for the purpose of studying the plague. This is a case where a politician is not out of place as President of the Board of Health, for the idea was suggested by Col. Michael C. Murphy and carried out by him.

PERSONAL.

HON. TIMOTHY L. WOODRUFF, president of the Maltine Company, of Brooklyn, has been renominated as Lieutenant-Governor of the State of New York. Governor Woodruff has already served two terms in that office and the compliment of a third nomination is unprecedented. Senator Depew in presenting Mr. Woodruff's name to the convention said: "He represents, in its best sense, the business-man in politics. He is the ideal young man in politics and meets all the requirements of the ever discussed question in the colleges of the educated man in politics. Beginning his career with no capital but brains, culture and courage, he started at the foot of the ladder, at small wages, and he achieved independence and won the confidence of the business community before he was thirty-five years old."

DR. JOHN H. GRANT, of Buffalo, has received from the State Civil Service Commission notice of the result of the examination held

September 1, 1900, for the position of Surgeon of the Soldiers' and Sailors' Home, at Bath, N. Y. His name stands No. 1 on the eligible list, which ought to entitle him to the appointment.

Dr. Grant is a veteran of the Civil War, and is at present a member of the Health Department staff of the city. He also served as a medical officer during the war with Spain.

Dr. Ernest Wende, Health Commissioner of Buffalo, was highly complimented recently in a letter received from A. W. Penniman, M.D., London, Eng., inquiring if it is possible for him to secure from 3,000 to 5,000 copies of a paper on infant mortality, read by Dr. Wende before the American Public Health Association. Dr. Penniman writes that the report contains a wealth of information upon the subject and that he has as yet seen nothing so concise and convincing.

Dr. I. N. Love, of St. Louis, editor of the *Medical Mirror*, announces his removal to New York, where he will make his home in the future. Dr. Love has been appointed a teacher in the department of internal medicine at the Post-Graduate Medical School and Hospital. New York is to be congratulated upon the accession to its professional ranks of so accomplished a physician, teacher and writer as Professor Love.

Maj. Charles K. Winne, Surgeon United States, Army has been assigned to duty at Fort Porter, Buffalo, N.Y., as surgeon of the post. Dr. Winne is a native of Buffalo and entered the army from here as assistant surgeon in 1861. He is the son of the late Dr. Charles Winne, who was a famous surgeon in his day, and a long time resident of Buffalo. Maj. Winne is welcomed here by a large circle of friends.

Dr. Matthew D. Mann, of Buffalo, read a paper before the Fort Dodge (Ia.) Medical Society, on the afternoon of August 14, 1900, entitled, Some common mistakes in gynecological practice. At the evening session the society also listened to a very instructive lecture by Professor Mann.

Dr. Wm. C. Krauss, of Buffalo, has been made one of the associate editors of the *Psychiatrische Wochenschrift*, published under the direction of Dr. J. Bresler, of Freiburg (Schlesien) Germany.

Dr. John Guiteras, who recently resigned the chair of pathology in the University of Pennsylvania to fill a similar position in the University of Havana, has established there a journal entitled, "Revista de Medicina Tropical."

Dr. S. Goldberg, of Buffalo, who has been traveling and studying in Europe for some time, as announced in the July issue of the Journal, has returned and resumed his professional work.

Dr. Harry Mead, of Buffalo, sailed September 18, 1900, for a tour in Europe. He will visit Paris, London and various countries of the continent and will be absent about two months.

Dr. Prescott Le Breton, of Buffalo, announces change of residence and office to 122 North Pearl Street. Office hours: 8-9 a.m., 1-2 p.m. and 6-7 p.m.

OBITUARY NOTES.

Dr. J. M. Da Costa, of Philadelphia, Pa., died suddenly at his country home, September 12, 1900, aged 67 years. He was a distinguished teacher and author, having published many books, monographs and brochures. His most enduring work is his classic, "Medical Diagnosis," that appeared in 1864, and has gone through many editions.—**Dr. Hunter McGuire**, of Richmond, Va., died at his country home near that city, September 19, 1900, aged 65 years. Dr. McGuire served with distinction as a surgeon in the Confederate Army, and for some years after the war he occupied a prominent place in the South as a surgeon.—**Dr. Alfred Stillé**, of Philadelphia, died at his home September 24, 1900, aged 87 years. He was at one time a teacher and author of note, and had been president of the American Medical Association.—**Dr. Preston B. Scott**, of Louisville, Ky., president of the Confederate Army and Navy Surgeons' Association, died September 24, 1900, aged 68 years.—**Dr. Franklin Burritt**, of Fredonia, N. Y., at one time a member of the State Board of Charities and a manager of the Buffalo State Hospital, died at his home, September 23, 1900, aged 73 years.—**Dr. Lewis A. Sayre**, of New York, died at his home, September 21, 1900, aged 81 years. Dr. Sayre had been a surgeon of distinction and was famous in the treatment of deformities. His plaster jacket in diseases of the spine was a valuable contribution to the treatment of spinal affections.

SOCIETY MEETINGS.

THE Esculapian Club, of Buffalo, was entertained by Dr. A. F. Colton, at his home, 41 Otis Place, Thursday evening, September 20, 1900. Dr. A. W. Bayliss was the essayist of the evening, and his subject, which was interestingly handled, was The Uses of Electricity in General Practice.

THE Tri-State Medical Society will hold its twelfth annual meeting at Chattanooga, Thursday, Friday, Saturday, October 11, 12 and 13, 1900, just after the meeting of the Mississippi Valley Medical Association, at Asheville, N. C. A rate of one fare for the round trip will be in force on the occasion of the reunion of the Army of the Cumberland and the Spanish-American war veterans. The secretary is Dr. Frank Trester Smith, Chattanooga, Tenn., who should be addressed on any subject relating to the meeting.

THE Medical Association of Central New York will hold its thirty-third annual meeting at Rochester, Tuesday, October 16, 1900. All who desire to read papers or present cases may do so by communicating with the president, Dr. John Gerin, Auburn, N. Y.; Dr. C. A. Van der Beek, Rochester, N. Y., or the JOURNAL office. The association publishes an annual volume of transactions and ranks with the best medical societies in the state.

THE American Association of Obstetricians and Gynecologists held its thirteenth annual meeting at Louisville, Ky., Tuesday, Wednesday and Thursday, September 18, 19 and 20, 1900, under the presidency of Dr. Rufus Bartlett Hall, of Cincinnati, O.

The sessions were largely attended by Fellows of the Association as well as visitors, and the meeting was pronounced by all as one of the most successful, scientifically and socially, in the history of the Association.

The program was an unusual one, embracing almost every phase of gynecologic surgery, as well as many other subjects of interest to special workers in obstetrics, gynecology and abdominal surgery. The debates were full of spirit and extremely instructive. Members were present from the four quarters of the domain—from Massachusetts and Texas; from Arkansas and Canada; from Alabama and Wisconsin. The American character of this Association was thus fully emphasised, and it was never in a more flourishing condition than at present.

The social amenities were of the first order, beginning with luncheons during the noon recess on the first day, continuing during the two succeeding days, and reaching a climax at the annual dinner, served at the Galt House. At this function after the viands were liberally discussed, both song and speech served to enliven an hour or two over the coffee. The songs of Miss Anita Muldoon will ever remain a sweet memory with every one who heard her delightful voice.

The next meeting will be held at Cleveland, O., in September, 1901. Officers were elected as follows: President, Dr. W. E. B. Davis, of Birmingham, Ala.; vice-presidents, Dr. Edwin Walker, of Evansville, Ind., and Dr. A. Goldspohn, of Chicago; secretary, Dr. William Warren Potter, of Buffalo, N.Y., and treasurer, Dr. X. O. Werder, of Pittsburg, Pa.

THE Buffalo Academy of Medicine held meetings during the month of September, 1900, as follows:

Section on Surgery.—Tuesday evening, September 4th. Program: Angioma, Vertner Kenerson; Resection of joints, with cases, Herman Mynter.

Section on Medicine. —Tuesday evening, September 11th. Program: Clinical quantitative estimation of proteid digestion in the stomach, with demonstrations, A. L. Benedict.

Section on Ophthalmology, Otology, Rhinology and Laryngology. — Monday evening, September 17th. Program: Eye-strain or gastric reflex? A. L. Benedict; discussion opened by Drs. Stockton, A. A. Jones, E. Starr and Bennett.

Section on Pathology.—Tuesday evening, September 18th. Program: Blood examinations, H. G. Matzinger; discussion opened by Drs. Julius Ullman and Albert E. Woehnert.

Section on Obstetrics.—Tuesday evening, September 25th. Program: A few glimpses, including medical ones, of lands across the sea, Francis E. Fronczak. Obstetric view, from a gynecological standpoint, Charles E. Congdon.

THE American Public Health Association will hold its twenty-eighth annual meeting at Indianapolis, Ind., Tuesday, Wednesday, Thursday and Friday, October 22-25, 1900.

The Southern Surgical and Gynecological Association will hold its thirteenth annual meeting in Atlanta, November 13-15, 1900, under the presidency of Dr. A. M. Cartledge, of Louisville. The indications are favorable for a successful session. Members of the medical profession are cordially invited to attend. The secretary, Dr. W. E. B. Davis, of Birmingham, Ala., should be addressed on all questions relating to the meeting.

COLLEGE AND HOSPITAL NOTES.

The Medical Department of the University of Buffalo opened its fifty-fifth annual course of instruction at its building on High Street, Monday evening, September 24, 1900. Dr. Eugene A. Smith, adjunct professor of surgery, delivered the inaugural address to a large audience of students and citizens, which will be printed in the next issue of the Journal. The list of matriculates is a large one and the college is in a prosperous condition. The University is about to build an annex and enlarge its scope. A three-story building is to be reared in the immediate vicinity of the General Hospital, with an endowment fund of $40,000 that has become available during the last year.

Dr. John B. Murphy, of Chicago, has accepted a professorship in surgery and clinical surgery in the Northwestern University Medical School—Chicago Medical College. Dr. Murphy has been appointed surgeon-in-chief of Mercy Hospital with the direction of the surgical teaching in that hospital. He will give two clinics each week at the hospital. The hospital now contains 260 beds with abundance of clinical material. A new amphitheatre with a seating capacity of 300 is in progress of construction.

Dr. Archibald Church has been recently appointed professor of nervous and mental diseases in Northwestern University Medical School—Chicago Medical College—and head of the neurological department.

Book Reviews.

A Manual of Clinical Diagnosis by Microscopical and Chemical Methods. For Students, Hospital Physicians and Practitioners. By Charles E. Simon, M. D, Late Assistant Resident Physician Johns Hopkins Hospital, Baltimore. In one 8vo volume of 563 pages, with 136 engravings and 18 full-page colored plates. Philadelphia and New York: Lea Brothers & Co. 1900. [Price, $3.50.]

Nowhere in the field of medicine has advance been noted more than on the lines of clinical diagnosis. Greater accuracy here means better management, better treatment, greater professional success. Of late it has become necessary to add laboratory researches to the other means at command in order to insure the greatest possible accuracy, especially in doubtful cases. In other words, to exhaust all professional resources, the microscope, chemistry and bacteriology must be invoked, and the knowledge thus accumulated must be added to the information obtained by physical examination in order to make the clinical picture complete.

Simon was the first to publish a manual embracing laboratory methods of diagnosis and it was accepted with great favor at once. But little more than four years have elapsed since his book first appeared, and yet we now find ourselves confronted with a third edition demanding notice. The reviewer is first impressed with the fact that since the establishment of clinical laboratories in our medical colleges great changes have taken place in methods of teaching. The blood is now demanding primary attention in many diseases and is first considered in this book, to which about 100 pages are devoted. A number of most beautiful plates serve to give force and clearness to the text. The urine, always next in importance, has 225 pages assigned to it. The sputum, the gastric juice, and the feces are also very fully considered, while all the minor juices and secretions, such as those of the mouth, the vagina and other cavities and orifices of the body, are all duly discoursed upon in accordance with their importance.

In noticing the first edition we heartily commended it as an important aid not only to the specialist, but to the general practitioner. A somewhat detailed examination of this third edition serves to confirm our early judgment—an opinion which we here and now desire to accentuate. Such books are decided additions to the literature of medicine.

MANUAL OF PATHOLOGY, Including Bacteriology, the Technic of Post-Mortems, and Methods of Pathologic Research. By W. M. LATE COPLIN, M. D., Professor of Pathology and Bacteriology, Jefferson Medical College, Philadelphia; Pathologist to Jefferson Medical College Hospital and to the Philadelphia (Blockley) Hospital; Bacteriologist to the Pennsylvania State Board of Health. Third edition, revised and enlarged. 330 illustrations and 7 colored plates. Octavo, 846 pages. Philadelphia: P. Blakiston's Son & Co. [Price, $3.50 net.]

From a small beginning, one of the most complete works on pathology has sprung forth and has taken the place in the physician's library of some of the standard European works on this subject. During the winter of 1894 and 1895 the author published in serial form abstracts of his lectures, entitled "Lectures on Pathology" and at the close of the college session these were bound into a volume and placed upon the market. Merit found for them a ready sale and the edition was soon exhausted. This volume contained 250 pages and 51 illustrations. The second edition, published about a year afterward, contained 638 pages and 268 illustrations, and this the third edition, contains 846 pages, and 330 illustrations. This edition has been thoroughly revised, many of the chapters rewritten, new chapters added and a general overhauling has taken place. New illustrations have been added wherever necessary to elucidate the text and some nicely executed colored plates have been introduced.

The work is divided into three parts: Part I. dealing with technic; Part II. with general pathology, and Part III. with special pathology.

Under the chapters on technic—the author describes the methods of making a post-mortem examination, the instruments needed, arrangement of the post-mortem room, the index book, and then gives a very complete guide for the external and internal examination of the body. The different organs are described, and the methods of preserving them for future reference.

Under histologic methods, the author describes the fixing methods in vogue, the infiltration of the tissues, section cutting, staining and then takes up the microscope, describing its component parts and then gives some very useful rules for the use of the microscope. In the same careful, methodical manner is considered the bacteriological technic, the different cultures, inoculation of animals, Widal's test for typhoid fever, the examination of air, water and other fluids.

In chapter IV. the urine is examined, the collecting, centrifuging, examination of the organism and unorganised sediment, and the crystalline sediment are all very carefully explained. The technic of sputum examination occupies Chapter V. and the various epithelium, blood corpuscles and crystals are explained and illustrated.

Part II. deals with general pathology. Chapter I. discusses development, growth, starvation, malformation, disease, pathogenesis; the causes of disease are considered as the thermal, the traumatic and the bacterial. This is an interesting chapter, well written, and shows the author to be a good philosopher, as well as a pathologist.

In Chapter II. the author describes hypertrophy, hyperplasia, metaplasia, atrophy and allied disorders. Then follow chapters on infiltration, desquamation, necrosis, circulatory disturbances, inflammation and repair, the tumors, infective granulomata and temperature changes.

Part III. takes up special pathology. The chapter on the blood is well written, profusely illustrated, and cannot help but give to the student a good, practical understanding of this most important subject. The various blood instruments are described and illustrated and the good points of each are indicated. The chapters following are on the spleen, lymph glands, thymus body, serous membranes, the vascular system, organs of respiration, the liver, pancreas, muscles, bones and nervous system.

These subjects are all handled in the same masterful manner as the preceding chapters, are systematically arranged, carefully and accurately described and well illustrated. The colored plates on the lungs, kidney and bladder are handsome. Many of the subjects are tabulated, making them easily referred to by the reader; for instance, that on the blood, on page 448, is an excellent table. The work throughout shows very careful study and it can be cheerfully commended to student and physician alike.

The index is very complete and sensible—a very important adjunct to a book, inasmuch as it serves as a key for unlocking the contents. In this volume of 51 pages are devoted to the index, which gives some little hint as to the care displayed in the editing of the subject matter. W. C. K.

A MANUAL OF SURGICAL TREATMENT. By W. WATSON CHEYNE, M. B., F. R. C. S., F. R. S., Professor of Surgery in King's College, London; Surgeon to King's College Hospital, etc. And F. F. BURGHARD, M. D. and M. S. (Lond.), F. R. C. S., Teacher of Practical Surgery in King's College, London; Surgeon to King's College Hospital, etc. In seven imperial 8vo volumes, with illustrations. Volume III., 305 pages, with 100 illustrations. Philadelphia and New York: Lea Brothers & Co. 1900. [Price, $3.50.]

In following this work through volume by volume, one is struck by the jewel-like consistency of the authors, who have maintained the standard set up in their general preface to the first volume. The charm of simplicity is everywhere apparent. Given a surgical condition, they proceed to tell how to meet it, and the whys and wherefores are not lacking. Not alone this, but errors are pointed out and zealously guarded against. To make an error, according to the Cheyne and Burghard teaching would, after a careful study of the work, be almost criminal carelessness.

In the third volume, there is considered the treatment of surgical affections of the bones and amputations. In the preface the authors anticipate the only honest criticism which could be made, when they say: "It may be objected that we have not even mentioned many well-recognised methods of treating various fractures. The subject is so extensive that we have had to confine ourselves strictly to the principles of the work, namely, only to recommend those methods that have proved best in our hands; a mere enumeration of methods would be of no value for our purpose." It is just this originality which makes the Cheyne-Burghard surgery valuable as a working book. There is much that a practitioner will find of assistance to him; there is everything for the student.

The general consideration of fractures takes up the first chapter and then follows the special fractures, clavicle, scapula, humerus, forearm and hand; pelvis, femur, patella, leg and foot, in seven chapters. Each condition is handled in that careful, conservative fashion which characterises the whole work.

In that section of the volume devoted to diseases of the bones, there are taken up acute and chronic inflammation of bones, necrosis and phosphorous necrosis, tuberculous bone disease, syphilitic and rheumatic affections; rickets and scurvy-rickets; osteomalacia, osteitis deformans, leontiasis ossium, acromegaly, actinomycosis, tumors of bone.

In taking up amputations one is struck not alone by the very clear and concise descriptions, but by the illustrations, which have been most generously used throughout.

There is nothing in the amputating line which is not quite generally discussed. The illustrations show methods and procedures; every incision is indicated; bandaging and extension methods are so clearly set forth that one may see at a glance just what to do and how to do it. The majority of the illustrations are original drawings, and while they are not up to the standard of artistic elegance and delicacy, set up by some of the more recent publications issued in this country, they serve the purpose for which they were prepared; and being in black and white they help to keep down the price of a very valuable work on surgery. N. W. W.

REPORT OF THE COMMISSIONER OF EDUCATION FOR THE YEAR 1897–98. Volume I., containing Part I. Volume II., containing parts II. and III. Octavo, pp. 2640. Washington: Government Printing Office. 1899.

These two volumes contain fifty-five chapters of closely printed material, including tables, statistical matter and reports relating to education in different quarters of the globe. In the first volume, which contains Part I., there is a table showing the courses of study in medical schools throughout the United States, to which is appended an abstract of requirements for the practice of medicine in the various states and territories.

Volume II. contains Parts II. and III., in the former of which there is a chapter—No. XXX.— devoted to the consideration of medical inspection of schools. In several cities a system of daily inspection of schools by physicians is in vogue. This chapter is a compendium of information relating thereto and consists of a series of extracts from school and other official reports, from the writings and addresses of professional men and from other sources. A brief description of the system in Paris is also given.

In the first part, in Chapter XX., is considered education in Cuba, Porto Rico and the Philippines, while in the preliminary matter of Part I. an educational policy is presented for these islands.

The report is full of interesting material that may be studied with profit by educators, and is one of the best arranged documents of the kind that as been issued by the department of education.

TRANSACTIONS OF THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION. Volume XII. Twelfth session, held at New Orleans, La., December 5, 6 and 7, 1899. Edited by W. E. B. Davis, M. D., Secretary. Philadelphia: Wm. J. Dornan, Printer. 1900.

This splendid volume of over 400 pages records the proceedings of this great association during its twelfth annual meeting, held at New Orleans, December 5-7, 1899. It contains thirty-six papers, most of which were discussed in extenso and some of which are admirably illustrated. In the association are grouped some of the most distinguished surgeons and gynecologists of the South, besides a few who reside North of the old imaginary line boundary, but now, happily, not dividing nor separating the two sections.

Dr. Joseph Taber Johnson, of Washington, who was the president, delivered an admirable address which betrayed intimate acquaintance with the profession and great experience in society work. The hospitality of New Orleans is famous and it entertained the association in accordance with its royal traditions. The scientific work of the association was fully equal to the high standard that has characterised the previous meetings of the organisation. Dr. A. M. Cartledge, of Louisville, was elected president and under his able direction the association is preparing for a meeting at Atlanta next month. The volume everywhere betrays careful editorial handiwork, a most important element in such a book.

MEDICAL AND SURGICAL REPORT OF THE PRESBYTERIAN HOSPITAL, City of New York. Volume IV., January, 1900. ANDREW J. MCCOSH, M. D., and W. GILMAN THOMPSON, M. D., editors.

The excellent series of hospital reports of the Presbyterian Hospital of New York, instituted in 1896, is worthily continued as the volume of 1899, Volume IV., will testify. Other large hospitals are imitating the efforts of the Johns Hopkins, Massachusetts General and Presbyterian Hospitals by publishing annual reports and much valuable information regarding clinical details are finding permanent repositories.

In the volume before us are excellent articles on the surgery of the testicles, surgery of the biliary passages, cases of subphrenic abscess, scleroderma, empyemia, suppurative hepatitis, heart murmurs and heart lesions, statistics of 100 cases of cancer of the breast, pneumothorax, penetrating bullet wound of the chest and a paper on recording and classifying surgical histories.

These papers are all well written and some beautifully illustrated, especially the article on Surgery of the Testicle, by Dr. Eliot, Jr.

W. C. K.

TRANSACTIONS OF THE MEDICAL ASSOCIATION OF CENTRAL NEW YORK. Thirty-second annual meeting, held at Syracuse, N. Y., October, 1899. Wm. C. Krauss, M D., Editor. Volume VI. Buffalo Medical Journal Print. 1900.

This association again presents an admirable day's work in the eighty-five standard octavo pages which this volume contains. The publication of its transactions has stimulated the association to do most excellent work, and every member should feel an interest in continuing the plan that was put in operation so successfully some five or six years ago. The size of the page is admirably adapted for library purposes and should not be changed. An interesting meeting is in contemplation at Rochester, October 16, 1900, under the presidency of Dr. John Gerin, of Auburn.

BOOKS RECEIVED.

The Student's Medical Dictionary. Including all the Words and Phrases Generally Used in Medicine, with their Proper Pronunciation and Definitions. Based on Recent Medical Literature. By George M. Gould, A. M., M. D., Author of "An Illustrated Dictionary of Medicine, Biology, and Allied Sciences," etc. Large 12mo. Eleventh edition, enlarged. Illustrated. Philadelphia: P. Blakiston's Son & Co. 1900. [Price, $2.50.]

The Medical Directory of New York, New Jersey and Connecticut. Published by the New York State Medical Association. Volume II. 1900. [Price, $2.50.]

Brain in Relation to Mind. By J. Sanderson Christison, M. D., Author of "Crime and Criminals," etc. Duodecimo, pp. 142. Second edition. Chicago: The Meng Publishing Co. 1900. [Price, $1.25.]

Perfect Eyes. A Complete and Comprehensive Treatise on the Organ of Vision. Duodecimo, pp. 71. Illustrated. Sixth edition. New York: Benjamin F. Stephens, Publishers. 1900.

Medical Diseases of Infancy and Childhood. By Dawson Williams, M. D., Physician to the East London Hospital for Children. New (2d) edition. Specially revised for America by F. S. Churchill, A. B., M. D., Instructor in Diseases of Children, Rush Medical College. Octavo, pp. 538, 52 illustrations and 2 colored plates. Philadelphia and New York: Lea Brothers & Co. 1900. [Cloth, $3 50 net.]

Progressive Medicine. Vol. III., September, 1900. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in Jefferson Medical College of Philadelphia. Octavo, pp. 408, with 14 engravings. Issued quarterly. Philadelphia and New York: Lea Brothers & Co. 1900. [Price, $10.00 per year]

Manual of Diseases of the Eye. For Students and General Practitioners. By Charles H. May, M. D., Chief of Clinic and Instructor in Ophthalmology, Eye Department, College of Physicians and Surgeons, New York. Illustrated. Duodecimo, pp. 419 New York: William Wood & Co. 1900.

Transactions of the Royal Dublin Society, Vol. VII., Parts 2–7; Proceedings, Vol. IX, Parts 1 and 2; Economic Proceedings, Vol. I., Parts 1 and 2. Index, 1877 to 1898, inclusive. Dr. A. H. Foord, F. G. S., Editor.

A Treatise on Mental Diseases. Based Upon the Lecture Course at the Johns Hopkins University, 1899, and Designed for the Use of Practitioners and Students of Medicine. By Henry J. Berkley, M. D., Clinical Professor of Psychiatry, Johns Hopkins University, etc. Octavo, pp. xiv —601. Illustrated. New York: D. Appleton & Company. 1900.

A Treatise on Diseases of the Nose and Throat. By Ernest L. Shurley, M. D., Vice-president and Professor of Laryngology and Clinical Medicine, Detroit College of Medicine; Laryngologist and late Chief of Staff, Harper Hospital; Consulting Laryngologist, St. Mary's Hospital, etc. Octavo, pp xvii.—744. Illustrated. New York. D. Appleton & Company. 1900.

Transactions of the American Surgical Association. Volume XVIII. Session, held May 1–3, 1900. Edited by De Forest Willard, M. D., Ph. D., Recorder of the Association. Philadelphia: Wm. J Dornan, Printer.

Transactions of the Medical Society of the State of New York. For the Year 1900. Ninety-fourth annual session, held at Albany, January 30, 31 and February 1, 1900. Frederic C. Curtis, M. D., Secretary. Philadelphia: Wm. J. Dornan, Printer.

Twenty-sixth Annual Report of the Secretary of the State Board of Health of the State of Michigan for the Fiscal Year Ending June 30, 1898. Henry B. Baker, M. D., Secretary. Lansing: State Printers. 1900.

Report of the Mortality Records of the Mutual Life Insurance of New York. For fifty-six years—1843 to 1898. By Elias J. Marsh, M. D., and Granville M. White, M. D., Medical Directors. Published by the Company. 1900.

LITERARY NOTES AND MISCELLANY.

MESSRS. WILLIAM R. WARNER & COMPANY, of Philadelphia, New York and Chicago, have been advised of the award by the judges of the Paris Exposition, of the highest medal prize, for their justly celebrated pharmaceutical products. This makes the seventeenth World's Fair highest prize, which has been awarded this well known and justly celebrated firm, and we join in congratulations to Messrs. Wm. R. Warner & Co. over their well-merited and unbroken line of victories in competition with the world's manufacturers.

THE Maltine Company, of New York, has presented a new and striking original advertisement, on page xiii. of this issue of the JOURNAL. This "family tree" of maltine suggests a vigorous, healthy growth, which neither the stress of time nor of storms have been able to retard. The house is now twenty-five years old, and its watchword appears to be expansion, for it is growing everyday in strength and size.

THE J. B. Lippincott Company, medical publishers of Philadelphia, have purchased a site and begun the preparation of a new home in place of the old one which was destroyed by fire some months ago. The new location is on East Washington Square, where a fine building will be reared in place of the old-fashioned dwelling houses belonging to the Horace Binney estate. The Lippincott Company is to be congratulated upon the prospects of soon enlarging its long-time established and solid publishing plant.

W. B. SAUNDERS & Co., medical publishers, Philadelphia, desire to announce that they are about to establish a branch of their business in Great Britain. Mr. Saunders has recently spent several weeks in London, where all the arrangements preliminary to the opening of an English house have been completed.

This London branch will be operated in immediate connection with the home establishment, and the same methods that have been so successful in building up the business in this country will be employed in the conduct of this new branch.

Mr. Saunders also announces that he has ready The American Illustrated Medical Dictionary, by W. A. N. Dorland, editor of The American Pocket Medical Dictionary. This is an entirely new and unique work for students and practitioners. It contains more than twice the matter in the ordinary students' dictionary, and yet, by the use of clear, condensed type and thin paper of the finest quality, it forms an extremely handy volume only one and one-half inches thick. It is declared to be a beautiful specimen of the bookmakers' art. Price, $4.50 net; indexed, $5.00.

Saunders & Co. also have ready the following:

New Books.—Modern Medicine, by Drs. J. L. Salinger and F. J. Kalteyer, of Jefferson Medical College, Philadelphia. Price, $4.00 net.

Rhinology, Laryngology and Otology, and their Significance in General Medicine, by Dr. E. P. Friedrich, of the University of Leipsig, and Dr. H. Holbrook Curtis, of New York. Price, $2.50 net.

A Text-book of Histology, by Drs. Bohm and Davidoff, of Munich, and Dr. G. Carl Huber, of Ann Arbor, Michigan. Ready in October.

Essentials of Histology, by Dr. Louis Leroy, of Vanderbilt University. Price, $1.00 net.

Surgical Technic for Nurses, by Emily A. M. Stoney, author of "Stoney's Nursing."

New Editions.—Anders's Practice of Medicine, 4th edition. Price, $5.50 net.

McFarland's Bacteriology, 3d edition, revised and enlarged. Price, $3.25 net.

Hyde & Montgomery's Venereal Diseases, new enlarged edition. Price, $4.00 net.

American Text-book of Physiology, 2d edition, revised, in two volumes. Volume I. now ready. Price, $3.00 net, per volume.

Saunders's Pocket Formulary, 5th edition, increased in size by over 200 formulæ. Price, $2.00 net.

Garrigues's Diseases of Women, 3d edition. Price, $4.50 net.

DaCosta's Surgery, 3d greatly enlarged edition. Price, $5.00 net.

Stengel's Pathology, 3d edition, revised. Price, $5.00 net.

During the next six months they will issue from four to six volumes in Saunders's Medical Hand-Atlas Series.

THE International Journal of Surgery Company, medical publishers of New York, announces the following new books on press. The Treatment of Fractures, by W. L. Estes, A.M., M.D., director and physician and surgeon-in-chief St. Luke's Hospital, South Bethlehem, Pa. This book describes the treatment of fractures in a practical and interesting manner and is replete with original drawings, photographs and skiagraphs. Printed upon heavy book paper and substantially bound in cloth, containing about 250 pages. Price, $2.00.

The Technique of Surgical Gynecology, by Augustin H. Goelet, M.D., professor of gynecology in the New York School of Clinical Medicine, consulting professor of gynecological electro-therapeutics, International Correspondence Schools, Scranton, Pa., etc. This book presents to the reader the technique of gynecological operations in a manner combining simplicity with completeness. The various subjects are individually discussed and graphically illustrated with a large number of drawings and sketches especially prepared. About 300 pages, price, $2.00.

THE *Medical Mirror* announced in its September issue that hereafter it will be published simultaneously in New York and St. Louis. On and after September 15th, all communications for the editor should be addressed to Dr. I. N. Love, "The Iroquois," 49 West 44th St., New York City, U. S. A. All business communications, remittances, and exchanges to Love's *Medical Mirror*, St. Louis, U.S.A.

BUFFALO MEDICAL JOURNAL.

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Original Communications.

INTRODUCTORY LECTURE TO THE COURSE AT THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF BUFFALO, 1900-1901.[1]

By EUGENE A. SMITH, M. D., Buffalo, N. Y.,
Adjunct professor of clinical surgery, University of Buffalo.

THE fifty-fifth regular session of the Medical Department of the University of Buffalo begins tonight, and it has become my duty and privilege to welcome the students to the college halls, and to add such words of admonition as may tend to make them realise their responsibilities and to grasp their opportunities during the coming year. It becomes my privilege also, on this occasion, to address the public in general on matters which pertain more or less directly and intimately to the general public, as well as to the University and its teaching and student bodies.

In courtesy to the public, including the friends of the faculty and the students, some of whom are here tonight, it is my purpose to discuss first the matters which in my estimation affect the public, more especially the people of the City of Buffalo, as well as the University. While it is not my intention to minimize the importance of the Departments of Law, of Pharmacy and of Dentistry, the burden of my remarks will bear especially upon the Department of Medicine.

The people of Buffalo know the medical college as an institution which yearly brings a large number of more or less unruly students to the city and yearly adds to the present surplus of doctors. Pet cats and dogs are known to disappear during its sessions, with no relation, in the past at least, to the fear of hydrophobia, now so important a feature in the canine mortality rate. School children go around the block to avoid passing the dreadful doors of the college building, excepting high school damsels, who go a block out of their way to pass its portals when the students are not at lecture. Extremely timid people resemble the Chinese in their watchful care and anxiety for the graves of their ancestors during the college year and the continuance of dissection.

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[1] Delivered at the opening exercises of the Medical Department of the University of Buffalo, September 24, 1900.

Not to elaborate this line of thought, there is to Buffalonians from another point of view a financial and material side to the presence of a large school in the city, capable, as it is, of supporting a town of fair size composed of the classes maintained by trade and subsistence. Omitting all discussion of these acknowledged financial benefits of the University, there is some controversy as to the intellectual and ethical advantages to the community resulting from the presence of the school, and it is to this point of view that I wish to give some consideration.

To me, there seems no question of its benefits in these directions. They rest upon the general proposition that a center of education is a center for culture. Theologians, physicians, jurists, statesmen, soldiers, were educated in the log cabin schools of Revolutionary times, and such schools made possible the political and social advantages we enjoy today. Ambition was enclosed by the doors of those humble schools and the scholars breathed in them the atmosphere of truth, and learned at least the one lesson of duty. Religious intolerance, superstition, injustice to the Indians and other faults may be laid at the doors of the Pilgrim forefathers, but the log school house kept the light of education burning and made possible the evolution which culminated in the Declaration of Independence.

When we compare our schools of the present with those of the past, it becomes a question whether modern advanced methods of education are doing as much for the present generation as the modern wonderful advances in methods and equipment would lead us to expect. As for the old-time medical school, maintained by the profits derived from teaching, it accomplished in the past a work of unquestioned material, intellectual and ethical benefit for the people of our country. The modern medical school in this country, where State support is not the rule, as in Europe, is in a transition stage. Some medical men, failing to perceive this, unjustly disparage their profession by proclaiming that medical teaching is stationary and pecuniary and that there are too many medical schools and too many doctors. Such expressions are at times heard from Buffalo physicians regarding

Buffalo's medical college. Some deny the steady progress of medicine or at least of medical teaching. As a matter of fact the two go hand in hand, and while all of us will admit there are too few good medical schools and too few good doctors, we can not accept the more sweeping assertions already mentioned.

It is in truth entirely correct to say that medical teaching is in process of evolution. Yearly the standard of scholarship in our medical schools is being raised. A graduate in medicine of ten years ago knows nothing of clinical pathology, more especially of hematology and bacteriology, unless he has recently taken a post-graduate course of special instruction, or has kept abreast of medical technical advances by association with the teaching body of a medical school. It argues a commercial spirit in the medical men who wish to reduce the number of medical schools and of graduates, with the intention of thereby increasing professional work for the men now in practice. If they do not advocate change from this point of view let these men bend their misdirected energies, now devoted to decrying existing schools, to the upbuilding and betterment of those schools and to raising the standard of medical education until, according to the law of the survival of the fittest, those not so fortunately situated as is Buffalo's medical college must close their doors because of lack of inducements to attract the ambitious student. Such advice, if followed, would lift the pessimistic Buffalo medical man, strongly tainted with the suspicion of commercialism, up to the plane of the medical men whose optimism leads to scientific and ethical progress in medicine. It would lift the pessimist from the trade of medicine with a purely money-earning capacity, to the profession of medicine with emulation in place of rivalry, with science placed before money. When Jenner worked out, by close observation, the value of vaccinating cowpox into the human being to immunize him against small-pox, he sacrificed the trade of medicine to the science of medicine and immortalised himself in bestowing a blessing on mankind by staying the ravages of a dreadful disease, until his time unchecked.

As regards ethics, no labored argument is needed to prove that the medical profession of a University town stands on a higher plane than that of provincial towns and cities where no such school exists. Consider the suspicion, the jealousy, the uncharitableness of the professional man toward his professional brother in country, town and city with no medical school. Professional animosities, bickerings and jealousies in Buffalo do not, and should not enter the class with them.

In our largest cities it is commercialism, not medical schools, which has led to the degeneration of medical ethics, and which has led to loud complaint and much adverse criticism. It may be admitted that where two or more rival schools struggle for existence in a territory too small for more than one, the professional tone is lower than where the demand is in just proportion to the establishment in this respect. Even here argument could be developed at length to show the ultimate evolution of ethics through a period of harsh criticism and mutual incrimination and recrimination to a time when the weary contestants, measuring themselves after the struggle, find the proper balance and relation between themselves. Given an era of such good feeling that men cease to strive to excel, that emulation should languish, and the result would be complacent mediocrity. This truth so far affects the individual that the man who has no competitors, or who far transcends all competitors, soon falls short of his best possibilities.

The relationship of the college to Buffalo must now be considered from the point of view of the faculty. Upon the faculty devolves duties and responsibilities not altogether appreciated by the public at large. Some there are who think the professorships sinecures, loaded with honors and emoluments. Few, indeed, are aware of the amount of time, the anxious thought and the physical work devoted to the shaping of the policy and the work of the college. A still smaller number know that the financial returns barely equip and run the technical and purely scientific departments of the school.

The Medical Department of the University of Buffalo had its origin in Buffalo when the city was less than a quarter of a century old. It has grown with the city for more than half a century and it has done much for the material and intellectual advancement of the city. Its present prosperity reflects a prosperous community in the surrounding country, including Western New York, Northwestern Pennsylvania, Eastern Ohio and Ontario, from which regions it draws its students. Its present aspirations, looking to the early possession of the broadest and most advanced course of the best medical schools of the country, are linked with the successful progress of the city of Buffalo toward metropolitan growth in size and wealth. Beyond any doubt the features exist which make possible the future material growth of Buffalo, and with its growth the features which go to make all the scientific and technical departments of a great university and center of learning will find a nucleus in our school. Harvard Medical School and the Boston School of Technology could not flourish simply by reason of the collegiate atmosphere of Cambridge. They had to be located in the neighboring populous city of Boston. As regards a department of art for Buffalo University a moderate degree of optimism would see a field for a strong college with Buffalo's environment and its present nucleus.

The ambitions of the faculty are deserving of earnest support from the citizens of Buffalo. Year by year the college has responded to the demands of higher medical education by improvements in its buildings and equipment and by accessions to its teaching staff. It is not of interest at this moment to repeat item by item, the gains in method and extent of teaching, as compared with a few years ago, or even with last year. This information can be found in this year's annual announcement, with which each student has made himself familiar before this. It should, however, be said that this year sees the practical outcome of the union of the medical department of Niagara University and the medical department of the University of Buffalo. This was accomplished by opening to our students the doors of the hospitals which gave fame to Niagara in years past as a college with excellent facilities for clinical teaching. Few, if any medical colleges, can command for their students the wards of so many large hospitals as does Buffalo now. With the Sisters of Charity Hospital, St. Mary's Orphan Asylum and Maternity Hospital, The Buffalo Woman's Hospital and the Providence Retreat, added to the Buffalo General Hospital, and other institutions which formerly gave the college its clinical facilities, its wealth in this respect is unexceled. In this most important feature of a medical training Buffalo overshadows most of our richest and most famous universities, owing to their location in small cities, and in contrast Buffalo's poverty in money endowment is made most glaring when compared with these same richly endowed schools. With the same endowment the University of Buffalo would occupy the position of Johns Hopkins University. It would have technical and scientific schools which for many years at least would by virtue of environment overshadow the departments of arts, of theology and of law.

Possessing unexceled, if not unrivaled opportunities for scientific research and instruction in her wealth of clinical material, the University of Buffalo has also in her teaching body men imbued with the scientific spirit. The home of the medical college was very humble in its infancy, yet James P. White, Julius F. Miner, Frank H. Hamilton, Austin Flint, John C. Dalton, Edward M. Moore and Thomas F.

Rochester were giants in the history of medicine in the past, who dignified the frame work of wood and stone, called the old Buffalo Medical College, with the fame of their deeds and names. Buffalo between 1846 and 1870 is of interest to the antiquarian in old prints and photographs, but it is of interest to the present generation much more by reason of the deeds of such men as were just named, and in 1950, beyond a doubt, Buffalo of 1900 will be remembered by the deeds and names of men now in the harness in the heat and the toil of the various walks of life. In the literary and scientific fields, men whom we now daily watch, praise, admire, imitate, criticise, blame, misunderstand, misjudge, and even condemn or despise, will stand in proper perspective before the coming generation, some of them giants in intellect as were the men who founded our college in the decade 1845 to 1855.

Without thought of servility or flattery, we may claim for the university scientific men imbued with the spirit and possessing the ability so to discharge their duties as teachers of students and as leaders of medical thought, that the future will more fittingly assign them their just reward of fame and position than we of the present can do, influenced as we are by the personal considerations, which in the frailty of human nature warp our judgments by limiting our view of the characters and acts of our contemporaries.

The University of Buffalo belongs to Buffalo. It alone lifts Buffalo into the atmosphere of literary and scientific activity, to which commercial and material prosperity have given the city a right to aspire. It has a field and a mission. Its faculty has the welfare of the school at heart, but endowment is necessary to enable the departments to unfold as they could and should.

When we read of the sums given to the cause of education we find how Buffalo suffers in comparison. About $30,000,000 were given last year, mostly to the large colleges already rich. Of this sum more than half was given by donors who are still living to observe with mortal eyes the good their gifts are doing. This should point a moral to some philanthropic citizen of Buffalo, or resident of the surrounding country. He can raise a monument to his memory and live to be a spectator of its benefits by generously endowing those departments of the college, that may render incalculable service to mankind in the unknown fields of science. Where such endowment can be obtained only as a bequest, its usefulness is seriously impaired and may be indefinitely delayed. The legal profession is prone to develop some complication in a will, which, medically speaking, makes the prognosis as regards benefit to the college exceedingly dubious. An irritated professor whose college was thus kept starving in sight of the promised land of plenty was moved to write the following song:

> "God bless you, Gentlemen! Learn to give
> Money to colleges while you live.
> Don't be silly and think you'll try
> To bother the colleges when you die,
> With codicil this, and codicil that,
> That Knowledge may starve while Law grows fat;
> For there never was pitcher that wouldn't spill,
> And there's always a flaw in a donkey's will."

It may be possible the printer erred in saying "a donkey's will," and that the professor wrote it "donor," but the verse shows it donkey.

In the past few weeks a matter of endowment has been developing of extreme interest to all who have faith and pride in our school. The sum of $25,000 was given by one generous donor, whose name is still withheld, and others adding to it, a sum of nearly $40,000 is now available, under college management, for building and equipping an institute which is to be primarily designed to prosecute the research work in cancer now being conducted. The scope of the work, however, is so elaborate that room will be found for research in all of the different branches of medical science. The plans provide for rooms devoted to research in bacteriology, pathology, physiological chemistry, microscopy, microphotography and radiography. The equipment in these various branches of science will be complete and the opportunity for original work in the great field of experimental research will be inferior to no laboratory. What new discoveries, rivaling those of Pasteur in scientific interest, and what new practical benefits may thereby be gained for the world, scientific laboratories are best fitted to reveal. Let us hope for Buffalo that some of the honors and laurels may be won by our workers in these fields.

It is hoped that the building can be completed and put into use by next Spring. It will be near the college in the immediate vicinity of the General Hospital, and thus advantageously placed for scientific work, will mark the first great stride toward placing the University of Buffalo on an equal footing with the best institutions of learning in New York, Philadelphia and Baltimore.

This endowment is of interest from another point of view. New York State's government and philanthropy are here joined in furthering scientific work. The dread of cancer and of its tendency to a fatal termination has led the legislature of New York to appropriate money generously to investigate the disease with a view to ultimate curative discoveries. Buffalo Medical College has given a home to the state laboratory. In Europe such enterprises, as well as the universities, are entirely supported by the state. In this country, as institutions of learning have outgrown the stock company period of development and have become more worthy of existence, philanthropic gifts and bequests have in the main been the source of revenue and support. With state aid and philanthropy now united in furthering one branch of our medical college, how ungracious in the future will be any carping criticism of the worthy aims and ambitions of the University or its faculty on the part of any Buffalonian! If all rally to the support of our school, working unitedly with singleness of purpose, it will soon obtain the highest confidence of the educational world, and will attract men who will add to the city's fame. Richer schools in the past have taken from us good men in literary and scientific lines, attracting them to broader fields than ours. Let the near future show us the way to bring them back and others with them, if we can not here develop the talent we no doubt have among us!

To the medical profession in Buffalo and the vicinity, let me recommend a discussion of any differences we may have on medical and educational matters among ourselves, thus promoting our united action and professional dignity, and disarming the criticism and distrust on the part of the laity which a free public discussion of such differences must induce.

When I now turn to address the students, I take pleasure in extending to all the classes a cordial welcome on behalf of the faculty. Taking it for granted that you all have entered the college with the ambition to make the study and practice of medicine in the broad sense of medical science your life-work, I congratulate you. Next to the service of the church you have chosen, in my estimation, the noblest profession. The duties, possibilities and rewards of the profession of medicine it is more fitting to discuss in a valedictory address at commencement, rather than now at the opening exercises of the college year. Nor do I wish to recapitulate the advantages in the features of the course, as laid down in the curriculum which Buffalo Medical College has to offer, to make the year 1900-1901 a notably auspicious year. Words of admonition will not, I trust, be taken to indicate that I consider students lacking in system in their work, diligence in its pursuit or steadfastness to carry it to completion. Rather let me speak as one who was a matriculant in medicine some few years ago. The young men and women who sit before me, about to resume their work, or who appear here to begin their career in medicine, have but a faint idea of the increase in knowledge, and the increase in ease of acquisition of that knowledge with instruments of precision, as compared with the course in medicine which their teachers were given.

Medicine as a science is still progressing, and you are also students in its expanding field. Fully to grasp the meaning of facts now known to us all and to deduce therefrom truths still to be discovered, would mean fame and fortune almost at once upon graduation. Begin and continue diligent, persevering and systematic study. As a freshman do not fritter away time in the thought that with four years of time, work can be begun in earnest at some later date. As a sophomore, build upon your foundation of elementary work the beams of the superstructure of practical medicine. As a junior complete this framework. As a senior, with commencement less than a year ahead, opening to your view the prospect of personal responsibility in the competition of life, seek to embellish the framework of practical medicine with its crowning decoration, a judgment founded upon cultivated and trained powers of observation. Seek to rise above medicine as a "science of guesswork" as some one has reproachfully called it. Say but little of exploratory operations to make diagnoses. Disregard advice to give medicines on the ground that if they do no good they can do no harm. In the laboratory, study methods and reasons rather than merely to copy routine experiments. At the clinic observe closely a demonstration. See, feel and hear what the instructor points out, and reason on his reasoning. It is not the ability to say I have seen a case of hydrophobia, but the ability to diagnosticate a case of hydrophobia from one of hysteria, which makes the medical man. Upon examining a patient, how often is disease found in various parts of the human mechanism! To select and treat the organ most essential to life, and then to treat in their order such organs as need treatment to restore health marks the ideal practitioner.

Classify and systematise your facts, avoiding collecting them hap-hazard, thus developing your judgment. This advice is exemplified in the story of the pilot on one of our great rivers, who was asked by a young man how long he had been a pilot. He answered: "twenty five years." Then," said the young man, "I suppose you know every rock and every sand-bar in this river." "Oh, no! I don't," said the old pilot, "but I know where the deep water is."

The pilot's wisdom corresponds to the experience of the old family physician. The methods and explanation of the young doctor are more admired, but the old man's advice is more trusted. When we say a young man has an old head, we mean he has early developed the judgment that men ordinarily take years of experience to acquire.

In conclusion, I could wish for some small inspiration of the gift of prophecy to address public, faculty and students on so auspicious an occasion as the opening of the college year 1900-1901, closing as it does the nineteenth century and beginning the twentieth. The fortune of the University of Buffalo has kept pace in the past with the remarkable growth of Buffalo. We all look confidently for continued prosperity for Buffalo, and in the coming year, especially with the Pan-American Exposition, now unfolding so promisingly, the University should develop in a degree commensurate with the development of Buffalo. Let the medical profession educate the public to believe in the college and we can certainly hope, if we can not actually prophecy, that the needs of the University of Buffalo will soon be met by an adequate endowment, enabling it to continue in the future its career of usefulness to man and of honor to the city—the center for Buffalo of intellectual and ethical culture.

1018 Main Street.

IMMUNITY IN TUBERCULOSIS.

By A. D. LAKE, M. D., Gowanda, N. Y.

IN THE rapid progress in medicine which the past decade has witnessed, only a few things have positively been made known to us regarding tuberculosis, first and foremost standing the unrivaled discovery of Koch—the bacillus. The growing, perhaps generally admitted, belief in the contagiousness of the malady is not new, as the same opinion was repeatedly expressed by observers many years since.

As to the therapeutics, who can say that today, except in a general way, guided by our improved knowledge of hygiene, foods, etc., and climatic conditions, remedial measures, as applied to the treatment of tuberculosis, are any more effective than those used by our forefathers. We still have no specific.

The great field which this disease in its various forms and manifestations opens up for study and investigation, although continually explored by the most earnest and skilful workers through all the past, has still reserved its great secrets, the revelation of which is to reward the labor of the students of the present, or of those who are to come after. In any attempt to discuss this subject, one is confronted at once with the impossibility of grasping more than a small portion of the matter. At the present time a few points in etiology and treatment are perhaps occupying more attention than others. No more important question demands our attention than the renewal of investigations as to the contagiousness of this malady. Admitting that sufficient evidence exists to warrant placing it among affections of this class, then we are given a new basis for study, inquiring first as to what other features it may have in common with most other infectious diseases. This question has been to the writer an interesting subject of investigation, and the possession of a comparatively large field for observation has led him to believe that tuberculosis is not only infectious, but that it is in other respects most analagous to this class of diseases.

The scope of this paper will not permit even touching upon all points of this similarity, but I desire briefly to submit to you my reasons for believing that tuberculosis, like several other infectious diseases, confers immunity; that occurring in glands, bones and joints, and possibly in mucous membrane, and being recovered from, affords protection from subsequent tuberculosis of the lungs. That this disease existing in mild form in parts of the body other than vital organs is susceptible of recovery, and with recovery produces immunity.

You will pardon me if I digress here for the purpose of giving a description of the locality where, and the people among whom my observations regarding this disease have been largely made. The Cattaraugus Reservation is situated in the valley of the Cattaraugus creek, extending up this valley from Lake Erie, twelve miles, and in width one and one-half miles each side of the creek, partly in Cattaraugus county and partly in Erie county, the stream being the boundary between the two counties. A part of the reservation is level, viz.: the flat lands on each side of the creek. On the south side of the creek and three-fourths of a mile distant, an elevation commences, which attains a height of 600 feet in four miles. The elevation is less on the north, but the Reservation is several hundred feet lower than any of the surrounding country. The creek contains a far less volume of water than formerly, and in its recession has left on each side a wide strip of flat land, the soil of which is alluvial and produces most abundant crops. This ancient river bottom is about 100 feet lower than the rest of the Reservation and is very thickly settled, the richness of the soil and the ease with which it is cultivated making it the favorite land of the Indian, while large tracts of land more elevated are entirely uninhabited. Probably three-fourths of the population live on the river bottom. The whole surface of the Reservation has been for many years nearly denuded of timber, nothing being left but small underbrush. The trees have been cut and sold for lumber. A large tract of beautiful pine has been disposed of in this manner.

The first point to attract the attention of one having occasion to look after the health of these people is the imperfect and poorly developed physique of the children, and also of the next preceding generation. This is especially characteristic of the males. The Indian women present a far more vigorous appearance and evidence of larger vitality; but the last two generations have not the endurance of their predecessors in either sex. A further study into their physical condition confirms this impression. On watching them engaged in a game of ball, it is seen that the violent exercise necessarily undergone is very fatiguing to them, and that after running rapidly for a few minutes, their respiration is increased to such an extent that it becomes fairly laborious. They frequently throw themselves on the ground, completely exhausted. The same is true in the dances that form a part of the pagan ceremonies, which are still observed to some extent among them. The surrounding farmers find it impossible to obtain the same amount of work from the Indians whom they employ that they get from white laborers, and this applies to the more industrious class who are willing to work. Instead of the full-chested, robust figure presented by the uncivilised Indian of a few generations past, we see the emaciated, stooping, and in all respects inferior, and degenerate successor of today.

Now, when is added to this condition of physical depravity, the fact of their miserable habitations, unhealthful sanitary surroundings, and their intemperance, we have all the factors needed for the propagation and increase of those diseases so prevalent among them. They pay little or no attention to personal cleanliness. They live largely upon a poorly cooked vegetable diet, the only meat with far the larger number being fat salt pork. Their houses are built slightly elevated from the ground, in many instances the cold air having free access beneath the floor. The rooms are small and ceilings low. A family of half a dozen are frequently crowded into a room twelve feet square, occupying it day and night.

A very interesting study presents itself to the philanthropist as well as to the physician, regarding the association of these causes with the present condition of the race, and the probability of improvement by their removal, if such removal be possible. Certainly with their continuation there can be no hope, and he who will be most useful in elevating the Indian to a higher grade of manhood must bring to his aid the knowledge and skill of the physician and sanitarian, as well as the sympathy and christianity of the devoted missionary.

The population of the Cattaraugus Reservation is about 1,800. The census, which is taken annually by the government, shows that for the past ten years there has been but little variation from this number. The death-rate is very large, as is also the increase by birth.

Of this 1,800, fully 100 die each year from tubercular diseases. Consumption occurs among them from early infancy. There is good reason to believe that one-third of the children born, die of this disease, or of some other form of tuberculosis, before the age of five years. If they pass this age in safety, they are likely to enjoy immunity until they reach puberty, at which time, especially with the females, there is great fatality.

Young men and women, who perhaps a few months before were apparently in good health, come to the dispensary with some indefinite complaint, and upon examination are found with tuberculous lungs. Whole families frequently die of this disease within a few years, and were it not for their wonderful fecundity the race would speedily become extinct from this cause alone. A slight attack of bronchitis, which affection is far more common than with the white race, is sufficient to lay the foundation of phthisis. It is very rare for pneumonia to be followed by recovery, for if the patient survives the acute stage of the disease he almost certainly becomes the victim of acute tuberculosis. The low vitality and consequent inability to resist disease, together with the poverty of resources for proper care, brings the malady to a fatal termination, in most instances within six months from the discovery of its existence.

It may be important to state that the study of tuberculosis upon which the conclusions of this paper are based was not only the result of observation of cases among the Indians living on the Reservation, but was also derived from my opportunities to observe the disease as existing among the inmates of Thomas Asylum for Orphan and Destitute Indian Children. At this institution children are received from two years of age and retained until seventeen. Thus for a long period of years, an opportunity is afforded for the study of the physical condition of each child, and to observe the later history of affections beginning in childhood more accurately than would be possible under most other circumstances.

Tubercular disease among Indian children, according to my observation, exists about as follows: first, in order of frequency stands affected glands, internal and external; next follows tubercular conjunctivitis, with frequent corneal ulcers; then eczema, cold abscess, tuberculosis of the lungs, and, lastly, tuberculosis of the bones and joints.

Many years since I had come to observe among the inmates at the asylum that those who had many glands destroyed by suppuration seemed to escape more serious tubercular trouble. In other words, the enlargement, softening and discharging of the contents of a large number of these glands protected the individual, in the larger number of instances, from consumption. On the other hand, a sufficient number of cases have been seen where absorption has been brought about by the use of iodine and other means locally, to establish the fact that the disappearance of the swollen glands is quite likely to be followed by the discovery of tubercular disease in some other part, generally the lungs. In fact, we became convinced that where many glands were involved and the engorgement extensive it was highly dangerous to promote absorption, and that cases did far better which were allowed to suppurate and after complete softening, opened by free incision, the abscess cavity washed with antiseptic solution, and if slow in healing thoroughly curetted.

An examination of the case book at the Thomas Asylum, made ten years since, showed at that date that there had been received during the preceding seven years 260 children; that out of that number 54 cases of hypertrophy of glands, tubercular in character, occurred. In 35 of these cases the enlargement disappeared by absorption, and was followed in 18 of this number by tuberculosis of the lungs, with 14 deaths. In the remaining 19 cases, profuse and extensive suppuration took place, the glands were entirely destroyed and in 8 cases the abscess cavities were thoroughly curetted. Out of this number there were 4 cases of pulmonary tuberculosis with 2 deaths.

Since the record from which the above tabulation was made, with the exception of two years, a comparatively accurate history of each case of disease occurring at the institution has been made. A review of this history confirms the conclusions herein given. Many children come to the Asylum with enlarged cervical and other glands. Others undergo this condition after becoming inmates. Under the plan of treatment now pursued these children become after a time the most healthful ones under our care. As before stated, the development of phthisis at puberty is a common occurrence, especially with the girls, but those who have undergone extensive glandular tuberculosis with suppuration, escape. This has been verified in so many instances under my observation, that I feel assured that, when I see a girl with many scars, showing previous tubercular abscess, she will safely pass the critical period of puberty.

The same protection seems to be afforded in tuberculosis of bones and joints. In several instances there have occurred, with long continued suppuration, open sinuses and extensive destruction of bone tissue and joint structure, followed by ankylosis. This last condition, complete as it may become, and lasting for many months, generally in time permits of motion with a resulting useful joint, even with extensive destruction of joint surface.

It is to be noted that these cases do not bear operation well. For instance, it was thought necessary to amputate the hand of a girl fifteen years of age, for extensive necrosis of the carpus. A careful examination of the lungs failed to reveal any disease of those organs, but two weeks subsequent to the operation, she began to cough, her temperature was elevated, and an examination of the chest showed beyond question the existence of tuberculosis, of which she died in a few weeks. We have a girl now in the last stages of consumption, which disease made its appearance after the amputation of the foot.

It would seem that the best results follow, as a rule, in these cases when all the processes necessary for the complete disintegration, separation, and discharge of the diseased tissue are allowed to take place, unimpeded and uninterrupted. Individuals are often seen among these Indians, showing by scars extensive loss of bone, who have evidently never received any treatment, and are now apparently in good health.

In addition to my work at the Asylum, I see at the dispensary on the Reservation, of which I have charge, from twenty to sixty Indians, each week. The chronic affections for which I prescribe there are very largely in some manner tubercular. Indeed, I think with very few exceptions the whole population of the Reservation may be divided into two classes: first, those who manifest existing tuberculosis; second, those who have suffered from the affection, as shown by the existence of scars, deformities, etc., and who are now, I believe, immune, and have become the more vigorous men and women of the tribe. It is not uncommon to obtain from parents this history: that out of a large family of children born to them only one or two are now surviving, the others having died of consumption. It is very often to be observed that the surviving children show by the presence of scars that they have suffered from glandular tuberculosis.

My observation of this disease among these people has forced upon me the belief that in tuberculosis, as with several other contagious diseases, recovery from one attack protects against a second invasion.

It would at least seem there is enough evidence that this is true to demand in the study of this great disease more thorough investigation, having in view the important question of prophylaxis.

Literature bearing on the question of how far tuberculosis affecting organs of small importance, may by its invasion and recovery therefrom, afford protection from subsequent tuberculosis of vital organs is, so far as I have been able to ascertain, exceedingly scant. Dr. W. Gilman Thompson, in Pepper's New System, says, after demonstrating the relationship of scrofula and tuberculosis: "It is true that fatal cases of phthisis seldom exhibit scrofulous symptoms or lesions." Dr. B. Rachford says, in the New York *Medical Journal*, "The early diagnosis of glandular tuberculosis in children is important for two reasons: first, it is curable; second, when recovered from, it affords partial protection against pulmonary tuberculosis later in life."

The prevalent belief seems to be otherwise, viz.: that tuberculosis of glands is the precedent of general tuberculosis; that general infection, which may be localised in pulmonary phthisis,is more often than otherwise derived from these so-called scrofulous engorgements. If it be true that tuberculosis is contagious, and few are bold enough to deny this with the cumulative evidence which the past few years has produced; if it can be shown that immunity from further attacks is secured by certain forms of the disease of comparatively mild character, then there is open to the thoughtful physician a wonderful field of labor, looking toward the extinction of the most fearful scourge known to humanity. With the acceptance of these two propositions, there comes before us the interesting possibility of not only curative treatment, but also of the production of artificial immunity, as applied to the disease under consideration.

The study of the protective influence of blood serum containing virulent specific microörganisms, or cultures of the same, or some modification of it, is at present largely engaging the attention of bacteriologists. It has also so far convinced practical men in our profession of its great value, that in rabies, tetanus and diphtheria, it has become an established therapeutic agent.

May we not reasonably hope that the next few years are to see the same plan of treatment successfully applied to tubercular phthisis? When tuberculin had fallen into disuse, many were convinced that at least the embodying principle was correct, and they looked with confidence to the outcome of the further developments of the investigations of Koch, its great discoverer. There can be doubt that the present generation is to witness the fruition of the splendid work of Koch, Pasteur and others in a vastly decreased mortality from many infectious diseases. Among them let us hope is to be included tuberculosis.

AN INQUIRY INTO THE EXISTENCE OF AUTOCHTHONOUS MALARIA IN BUFFALO AND ITS ENVIRONS.

PRELIMINARY REPORT ON SPECIES OF MOSQUITOES AND BLOOD EXAMINATIONS.

By IRVING P. LYON, M.D., AND ALFRED B. WRIGHT, Stud. Med., Buffalo, N.Y.

[From the Pathological Laboratory of the University of Buffalo.]

THE investigations here recorded were suggested by two chief considerations, viz., first, the importance of accurately ascertaining the species of mosquitoes found in this locality with respect to establishing whether or not the *Anopheles* exists here, and, second, also, the frequence of the diagnosis of malaria by general practitioners of medicine.

A careful consideration of the first point seems to be one of the most feasible and scientific methods of throwing light on the second point, for it is now a demonstrated fact that various species of mosquitoes embraced within the genus *Anopheles* are the direct agents of the dissemination of malarial disease, and moreover the cumulative evidence of the more recent studies of this subject has focused strongly on the probability, that the *Anopheles* is the only active agent involved in the inoculation or production, by any means, of malaria.

We have, therefore, approached the investigation along two principal lines of inquiry, as follows: (1) What species of mosquitoes are found in and about Buffalo? (2) What evidence of the existence

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1. Read before the Buffalo Academy of Medicine, October 16, 1900.

of autochthonous malaria here is furnished by examination of the blood?

Before presenting the facts which we have gleaned by pursuing these lines of inquiry, we wish to make clear that we recognise the occurrence of occasional cases of malaria here, in which the infection had been previously acquired at places far distant from Buffalo. We have, therefore, excluded from consideration all cases of malaria in persons who gave a history of recent previous malarial infection and in those who had traveled at a distance within a period of a few weeks previous to the development of malaria at this place. We have also excluded all malarial cases in which the history was not explicit and positive with respect to these points.

Report on the Species of Mosquitoes collected in and about Buffalo.—Our investigation of the species of mosquitoes found in this vicinity covers the period May 12—October 7, 1900. During this time we have examined 374 mosquitoes caught within and near the city of Buffalo, chiefly from points along Lake Erie and Niagara River. The infrequence of mosquitoes in this region and the difficulty of obtaining them, in spite of our unremitting efforts, explain why we have not a larger number of specimens upon which to base our report. For convenience of reference we have compiled the following table, showing the date and place of capture, and the number, species and sex of the mosquitoes.

TABLE OF OBSERVATIONS.

Date of Capture.	Place.	Genus.	Species.	Sex.	No.
May 12, 1900	*191 Barthel street	Culex	Stimulans	Female	2
" 13, "	Rose Hill, Canada	"	" Impiger	" "	2 1
" 26, "	Foster's Flats, Can. (near whirlpool)	"	Stimulans Impiger	" "	9 5
" 27, "	*22 Park street	"	Stimulans	"	2
" 27, "	Marilla, N. Y	"	"	"	1
" 29, "	Alden, N. Y	"	" Impiger	" "	2 2
" 29, "	*Park Lake	"	Stimulans	"	2
" 30, "	*South Park, near lake	"	" Impiger	" "	3 5
" 30, "	East Concord, N. Y., swamp	"	" Stimulans	" "	12 16
June 2, 1900	*221 North street	"	"	"	1
" 7, "	" " "	"	"	"	1
" 8, "	Gardenville, N. Y	"	" Impiger	" "	3 4
" 9, "	Ebenezer, N. Y	"	" Stimulans	" "	3 1
" 10, "	West Seneca, N. Y	"	"	"	3
" 15, "	Grand Island, N. Y	"	" Impiger	" "	16 25
" 21, "	Clarence Center, N. Y	"	Stimulans	"	1
" 25, "	*221 North street	"	"	"	1
" 25, "	*Park Meadow	"	"	"	3

Date of Capture.	Place.	Genus.	Species.	Sex.	No.
June 28, 1900	*100 High street	Culex	Impiger	Female	1
July 2, 1900	*191 Barthel street	"	"	"	1
" 3, "	*221 North street	"	Stimulans	"	1
" 19, "	*O'Neil s Park	"	"	"	1
" 19, "	*O'Neil's Park, woods near	"	"	"	9
			Impiger	"	14
" 19 "	Point Abino, Canada	"	"	"	23
			Stimulans	"	15
" 22, "	*Squaw Island	"	"	"	18
			Impiger	"	6
" 23, "	Fort Erie, Canada, woods near	"	"	"	17
			Stimulans	"	12
August 4, 1900	Athol Springs, N. Y	"	"	"	5
			"	Male	4
			Impiger	"	12
			"	Female	5
" 16, "	*22 Park street	"	Stimulans	"	4
" 16, "	*122 Grape street	"	"	"	1
" 19, "	228 Gundary street, Tonawanda, N.Y.	"	"	"	2
			Impiger	"	4
September 2, 1900	Tonawanda, N. Y., swamp	"	"	"	27
			Stimulans	"	16
" 6, "	*191 Barthel street	"	Impiger	"	3
" 8, "	*379 William street	"	"	"	9
			Stimulans	"	6
" 14, "	*191 Barthel street	"	"	"	6
			Impiger	"	12
" 16, "	*Cazenovia Park	"	Stimulans	"	4
" 25, "	Niagara Falls, N. Y	"	"	"	1
October 2, 1900	*800 Main street	"	"	"	1
" 5, "	*77 High street	"	"	"	3
			†Pungens	Male	1
" 7, "	Athol Springs, N. Y	"	Stimulans	Female	2
			Impiger	"	2

* Indicates points within the city of Buffalo.

† The wings of this specimen were injured so that the identification of its species, as *C. pungens*, by Dr. L. O. Howard, was qualified as "probable." As the *C. pungens* and *C. impiger* are very similar, this specimen may have been, perhaps, *C. impiger*, especially as no other specimen of *C. pungens* was found in our collection, whereas *C. impiger* constituted more than half of our specimens.

It will be seen by reference to this table of observations that the 374 mosquitoes were caught on thirty-nine different occasions, from thirty-one different places, of which fifteen were points within and sixteen points outside of the city of Buffalo. Many specimens were obtained from lowlands, marshes, ponds, and streams, chiefly in the region of Lake Erie and Niagara River, in fact from places to which public report attached a reputation of being malarious. The specimens were obtained by months as follows: May, 64; June, 63; July, 117; August, 37; September, 84; and October, 9. The observations were therefore made during six consecutive months, representing the "malaria season," and the distribution during these months was fairly uniform, with the exception of the last month, October. From points within the city, 121 mosquitoes were obtained, and 253 from places outside of Buffalo.

Of the 374 specimens, every mosquito belonged to the genus, *Culex*, and not a single example of *Anopheles*, the malaria-bearing variety, was found. The distribution by species and sex is shown as follows:

Culex impiger	193	Male	12		
		Female	181		
Culex stimulans	180	Male	4	Male	17
		Female	176	Female	357
Culex pungens	1	Male	1		
Total	374		374		374

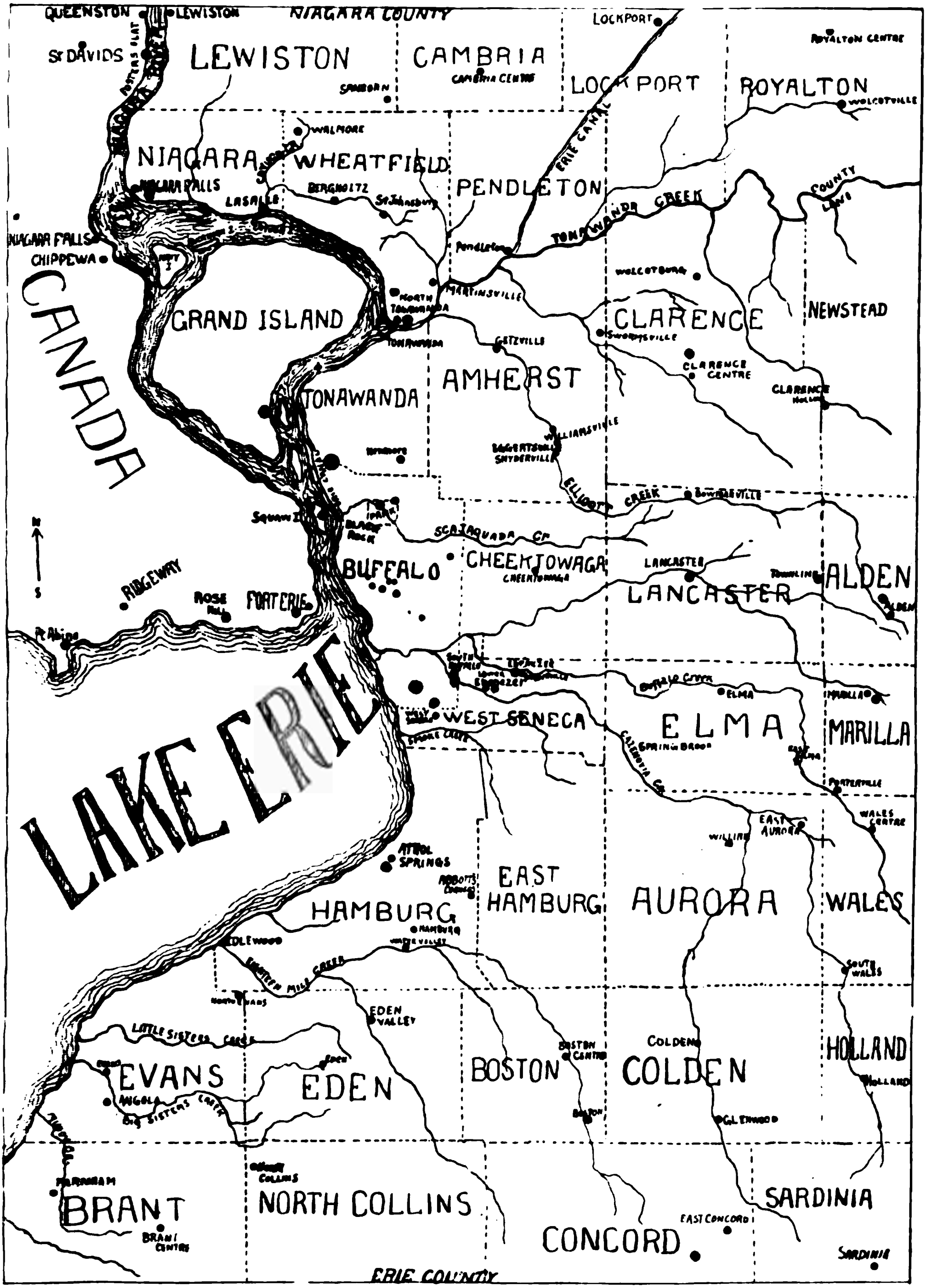
It is thus shown that *C. impiger* and *C. stimulans* were about equally distributed, and that a third species, *C. pungens*, was represented by only a single specimen, the identification of which was only probable, due to the injury to its wings.

The unequal sex-distribution will also be noted. Only seventeen males, as opposed to 357 females, were found, and curiously also all of them, excepting one, *C. pungens*, at a single time and place. We are acquainted with no other statistics showing the sex distribution of adult mosquitoes in nature. The apparent rarity of males may find its explanation in the fact that males are not blood-suckers and, therefore, would not be so frequently found as females near people, where they would be caught.

In identifying the species we were assisted by Mr. E. P. Van Duzee, librarian of the Grosvenor Library, and by Dr. L. O. Howard, entomologist to the Division of Entomology, U. S. Department of Agriculture, Washington, D.C., to whom we wish to here record an expression of our appreciation and indebtedness for their very kind assistance. In collecting the mosquitoes we have received assistance from many interested and kind friends, of whom our especial thanks are due to Dr. and Mrs. DeLancey Rochester, Dr. Eugene A. Smith, Mr. Albert Frey, and Mr. T. F. Ellis. Our especial indebtedness and warmest thanks are due to Dr. Herbert U. Williams, professor of pathology, University of Buffalo, in whose laboratory the work was conducted, for his active coöperation and generous assistance for many months in this study.

To the courtesy of Mr. Charles A. Bentz, student of medicine in the University of Buffalo, we are indebted for the accompanying diagrammatic map of the region of Buffalo and its vicinity, from which we collected the mosquitoes for this study. The locations from which mosquitoes were caught are represented on the map by points in red.

In concluding the report of this part of our investigation, we may summarise the findings by the statement that the known malaria-bear-


NIAGARA COUNTY
QUEENSTON
LEWISTON
ST DAVIDS
LEWISTON
CAMBRIA
CAMBRIA CENTRE
SANBORN
LOCKPORT
LOCKPORT
ROYALTON CENTRE
ROYALTON
WOLCOTTVILLE
NIAGARA
WALMORE
WHEATFIELD
BERGHOLTZ
ST JOHNSBURG
NIAGARA FALLS
LASALLE
PENDLETON
ERIE CANAL
TONAWANDA CREEK
COUNTY LINE
NIAGARA FALLS
CHIPPEWA
CANADA
PENDLETON
WOLCOTSBURG
MARTINSVILLE
NORTH TONAWANDA
GRAND ISLAND
CLARENCE
NEWSTEAD
SWORMVILLE
TONAWANDA
GETZVILLE
CLARENCE CENTRE
AMHERST
CLARENCE HOLLOW
TONAWANDA
WILLIAMSVILLE
EGGERTSVILLE
SNYDERVILLE
ELLICOTT CREEK
BOWMANSVILLE
SQUAW I
BLACK ROCK
SCAJAQUADA CR
N
S
BUFFALO
CHEEKTOWAGA
CHEEKTOWAGA
LANCASTER
TOWNLINE
ALDEN
LANCASTER
ALDEN
RIDGEWAY
ROSE HILL
FORT ERIE
PT ABINO
SOUTH BUFFALO
EBENEZER
BUFFALO CREEK
ELMA
MARILLA
LAKE ERIE
WEST SENECA
ELMA
MARILLA
SMOKE CREEK
SPRING BROOK
CAZENOVIA CR
EAST ELMA
PORTERVILLE
WALES CENTRE
EAST AURORA
WILLINK
ATHOL SPRINGS
ABBOTTS CORNERS
EAST HAMBURG
AURORA
WALES
HAMBURG
HAMBURG
IDLEWOOD
EIGHTEEN MILE CREEK
SOUTH WALES
NORTH EVANS
EDEN VALLEY
LITTLE SISTERS CREEK
BOSTON CENTRE
COLDEN
HOLLAND
EVANS
EDEN
BOSTON
COLDEN
HOLLAND
ANGOLA
BIG SISTERS CREEK
BOSTON
GLENWOOD
NORTH COLLINS
FARNHAM
BRANT
NORTH COLLINS
SARDINIA
EAST CONCORD
BRANT CENTRE
CONCORD
SARDINIA
ERIE COUNTY

ing genus of mosquito, *Anopheles*, was not found among 374 specimens, and its absence we regard as strong evidence against the development of malaria here.

Report on the Blood Examination of Cases of Suspected Malaria. —At a meeting of the Buffalo Academy of Medicine, in June, 1900, the writers, with the coöperation of Dr. Herbert U. Williams, offered their services gratis for making blood examinations in search of the malarial parasites for any physician who suspected the existence of malarial disease in a patient. In addition to this offer we also put ourselves in communication with the authorities and staffs of all the larger hospitals and requested the opportunity of examining the blood of all suspected malarial cases. As a result of these tenders we have examined during the past summer the blood of twenty-eight cases, five being in hospitals and twenty-three the private patients of practising physicians. In every case, without exception, the blood was found negative for malarial organisms. Indeed, during the entire summer we have found malarial parasites in the blood of only one case, referred to us by Dr. Grover W. Wende, that of a man who had recently arrived in Buffalo after extended travels.

The Experience of Other Observers with Blood Examinations.— We have solicited evidence also on the existence of autochthonous malaria in this locality from the experience of various physicians who have been in the habit of making blood examinations, as consultants, whose reports are briefly summarised, as follows:

Dr. Herbert U. Williams.—Has never seen a case of autochthonous malaria in Buffalo, and does not believe it occurs here.

Dr. Herman G. Matzinger.—During the past five years has never seen a case of malaria that originated here.

Dr. Albert E. Woehnert.—Has seen only a few cases of malaria in Buffalo in several years, and no case that he could affirm originated here.

Dr. Thomas B. Carpenter.—Has never seen a case originate in Buffalo.

Dr. George Roberts.—Has seen no cases here.

Dr. Earl Lothrop.—During the last five years has examined the blood of about 250 cases of suspected malaria, and found parasites in only three, all of whom came from malarious places distant from Buffalo.

Dr. N. G. Russell.—Has never seen a case of malaria that originated in this locality.

Dr. Charles S. Jewett.—Is of the opinion that autochthonous malaria exists in the city; has found malarial parasites (tertian) in only one case which he thought acquired the infection in the city, but of this he is not certain, having made no special inquiries at the time of examination.

Dr. Julius Ullmann.—Has never seen a case originate in Buffalo.

Dr. Vertner Kenerson.—Has seen only one case that he suspected of local origin, but he made no special inquiries on this point.

We may add our own testimony to the above statements, to the effect that during the past two years one of us (Lyon) has made numerous blood examinations and has found malarial parasites in only four cases, all of whom acquired the infection at places far distant from Buffalo.

The unanimity of the evidence contained in the above statements against the autochthonous development of malarial infection in and about Buffalo—for many examinations were made, especially in the hospitals, on patients from contiguous towns—needs no comment.

We have also solicited the opinions of many physicians from all sections of Buffalo and from neighboring towns, who have not made blood examinations, as to the existence of malarial infection originating in this locality. The responses have varied in every degree from a positive affirmation to a flat denial of its origin here. Those who affirmed its occurrence offered no evidence in support of their opinion, save the clinical and therapeutic behavior of their cases. We may be permitted to comment in this connection that opinion, based alone on clinical and therapeutic observations, can claim only slight consideration as opposed to the scientific and demonstrable evidence of the microscope.

Inquiries at all the large hospitals as to the frequence of malarial cases, without reference to the source of origin of the infection, elicited the general reply that such cases were only rarely seen.

We may, therefore, summarise this part also of our inquiry with the statement that we have been unable to discover any evidence that proves the development of malaria in and about Buffalo in recent years.

Before closing this paper we wish to call attention to a few further points bearing on the subject.

Geology and Topography.—Our observations have been made in the city of Buffalo and in neighboring towns within a radius of twenty-five miles, the great majority of observations having been made in places close to Lake Erie or the Niagara River within or very close to the city of Buffalo. Buffalo is situated at the eastern end of Lake Erie, whose elevation above sea-level is 573 feet. The city rises above this level in general from 20 to 100 feet. The county of Erie and the surrounding district from which our observations were taken range from about 500 feet above sea-level on the north at Niagara Falls to about 1,500 feet in the hills in the southern part of Erie county. In general the district is underlain by a rock-bottom, composed chiefly of limestone or shale, and is covered with clay or clay and sand or gravel to a varying depth. The district is well drained by numerous streams and contains few swamps and lowlands. Niagara River, the outlet of Lake Erie, starting at Buffalo, flows northward through the district with a strong and rapid current. The district is only sparsely wooded, and is chiefly an agricultural country.

Climate.—The climate of the region is salubrious. The mortality records of Buffalo show one of the lowest death-rates recorded for any city in the United States. The prevailing winds are from the southwest, passing over Lake Erie before reaching Buffalo. The influence of the lake tends to produce an equable temperature at all seasons. The summer temperature is relatively low, the winter not severe. Humidity is increased by the influence of Lake Erie. The city and district are swept by frequent winds, blowing off the lake, sometimes of violent character. The weather of the past summer is shown by the United States Weather Bureau records to have been above the average in temperature, humidity and precipitation.

It is therefore seen that the geology, topography and climate of the region are all opposed to the expectation of finding malaria endemic here. The country is high, dry, cool, windy and sparsely wooded.

Special effort was made to study cases of suspected malaria and collect mosquitoes from places that are commonly called malarious, viz., Tonawanda,[1] Squaw Island, South Buffalo, and the swamps, ponds, and streams of the region, and many observations were made from these places, but always with negative results for the presence of malaria or the *Anopheles*.

It is well known that the *Anopheles* does not inhabit the interior of towns and is found in general only in rural districts near natural collections of water, such as ponds and streams, where it breeds. Thus, in notoriously malarious regions, such as the Roman Campagna and the Chesapeake Bay region, the *Anopheles* has not been found within the cities of these regions, viz., Rome and Baltimore, nor do cases of malaria develop autochthonously within these cities, except sporadically. We did not therefore, a priori, expect to find *Anopheles* and autochthonous malaria within the city of Buffalo, and only, if at all, in the outside rural districts, and our special efforts were directed to obtaining evidence from outside places.

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[1] Further observations ought to be made especially at Tonawanda.

Inquiries at the Pan-American Exposition grounds, just outside of the park, where the soil has been upturned and artificial waterways have been in construction during the past summer, have shown that no cases of malaria have been reported among the workingmen employed there. We have several times attempted to find mosquitoes there, but always unsuccessfully.

The weather of the past summer has been more than usually favorable to the spread of mosquitoes. The average temperature, humidity and rainfall have been above the average. Still, mosquitoes have not been frequent and have been difficult to obtain, and the clinical diagnosis of malaria has probably not been more frequent than in previous years.

As previously stated, occasional cases of genuine malaria have been seen in Buffalo, imported from a distance. The return of our regiments from the South after the Spanish-American war, in 1898, brought back many cases of the disease. Had the *Anopheles* been a common inhabitant of this region, it is fair to assume that these imported cases of malaria would have afforded opportunity for the infection of the *Anopheles* and the subsequent development of an outbreak of malaria. This, however, did not occur. On the other hand, it is possible to suppose that the *Anopheles* might be imported to this region from a distance and become resident. In reply to the suggestion of this possibility, we need only say that we have failed to find it, and, too, in a season favorable to mosquitoes. Still we do not deny that *Anopheles* may have abounded here in the past or may do so in the future.

That mosquitoes, and even the *Anopheles*, may exceptionally be carried to a distance from their breeding-places is evidenced by the observation of Grassi, who observed a few specimens of *Anopheles* in a railway carriage traveling from Florence to Berlin. We have ourselves during the past week caught a mosquito (*Culex*) in a railway car on the Lehigh Valley Railroad, near Geneva, New York, in traveling from Buffalo. It may be that by such agencies and others the spread of *Anopheles* into new localities is effected, and in case the other conditions necessary are present, sporadic cases of malaria may arise. Such sporadic cases, due to such exceptional circumstances, would not however alter the general fact that malaria appears to be rare and is not endemic here. It seems to be a generally accepted fact that genuine malaria was in earlier years common throughout this region and through the northern and eastern states, although at present it is a rare condition away from the seacoast and in the country north of New Jersey.

The distance to which mosquitoes may be carried exceptionally by natural agencies is unknown. The available evidence tends strongly to show that mosquitoes usually remain close to their breeding-places and do not migrate far. They resist being carried by winds and storms and seek shelter against the violence of the elements. However, to what distance they may exceptionally be carried by violent storms is only conjectural. In this connection we may call attention to such a possibility from the cyclone that visited Buffalo last month. This storm traveled northward from the West Indies, passed Galveston, Texas, wrecking the city, and reached Buffalo on September 11th. The wind blew seventy-eight miles an hour and effected much damage. In the third and fourth weeks after the storm occurred, mosquitoes became more common in Buffalo than before, and much more frequent than is usual at this season of the year. Is it not possible that mosquitoes were brought by the cyclone and left in its track? Although we found no specimens of *Anopheles*, we have found since this storm a single specimen of *Culex pungens* (identification only probable), a species that we had not previously observed here.

We have had a secondary purpose in view in pursuing these investigations—namely, to contribute our minute share of evidence to the world-wide study that is now in progress of the relation of the distribution of the various species of mosquitoes to the production of malaria. All contributions, however, fragmentary, isolated and apparently insignificant, form an integral part of the foundation of evidence upon which the future knowledge of malaria-distribution must rest.

In conclusion we wish to state that we make no claim to having settled the question of the occurrence of autochthonous malaria here, but we believe that only by such studies as we have made can reliable data be obtained on which to base an opinion. It is sincerely hoped that further contributions to the subject will make certain what our work has made only very probable.

531 FRANKLIN STREET.

SEVERAL GLIMPSES, MOSTLY MEDICAL, OF LANDS ACROSS THE SEAS.[1]

By FRANCIS EUSTACE FRONCZAK, A.M., M. D., Buffalo, N. Y.

DR. ISAAC WATTS, the famous English author, wrote on the advantages of traveling as follows: "Nothing tends so much to enlarge the mind as traveling, that is making a visit to other towns, cities, or countries, besides those in which we were born and educated."

On the invitation of the chairman of the Obstetrical Section, I am expected to tell you tonight a few interesting things which I saw in my recent travels in lands across the seas. These things were not necessarily to be confined to exclusively medical topics, I believe, and yet I think I can eject enough, relating to our profession to warrant the chairman in inviting, and me in appearing before you.

Before proceeding further I wish to announce if anyone here present has a patient whom he desires to send to a temperate, equable, but humid climate, that the Azores is the place. The islands, situated as they are in the middle of the Atlantic, are ever moist, in fact, the humidity is so great there, that paper hangings will not adhere to the walls, and the veneering of furniture strips off. In one word, it is a case of chronic hyperidrosis with everything and everybody there, which even atropin and agaricin will not help. But let me proceed.

We know that the Arabians played a very important part in making the history of medicine. In fact, from the seventh until the fifteenth century, Arabians were the leaders in the study of our science. The Pyrenean peninsula was one of their strongholds, and even now, almost 500 years after their downfall in Spain, we find Arabs and Moors in all their oriental glory, with many of their ancient customs and traditions preserved in the Don Kingdom. These men delight in "doing" people, especially the foreigners—meaning the visitors to Spain--by two means, either by selling to them a worthless thing for a high price, and appearing in the capacity of merchants, or by presenting a person with a charm, which will protect him from all physical evil and disease. For this charm, if one keeps it, he has to give a suitable money gift, or the charm will not work.

Almost the entire Moorish population in Gibraltar, the principal, and now about the only place in Europe where they live, is engaged in this simple medical pursuit. These men are dirty, half naked, and they emit a peculiar specific, pungent odor. This odor has been mentioned by other travelers, but as yet no one explains the cause. It is possible that the asafetida-like aroma of a peculiar looking fruit, or onion, which they eat in great abundance, mixed with the glandular secretions and dirt, all undergoing a change, produces this nauseating smell. But not only the Moors in Spain are a little behind in their hygienic studies and practice. Our late opponents in the little diversion which we had in the Antilles, and near Manila, about two years ago, have the same weakness. By the last census in 1896, there were about 19,000,000 people living in Spain, of whom about 31,000 were medical doctors, that is 613: 1. Besides, there are about the same number of men and women practising who have had no medical studies. The death-rate of Spain, according to recent reports is 32 per 1,000, while the mortality in the United States is about 18.6 per mil. The climate of Spain seems to be delightful and healthy, and we do not hear of any great epidemics there. Why, then, the great mortality? By far the greater number of deaths must be due to lack of even elementary hygienic arrangements in villages and cities. The physicians have not struck me as being progressive, and I have heard time and again from English physicians there, that many Spanish surgeons smoke cigarettes (all Spaniards, men and women, are inveterate smokers) even during operations, and that they will make an incision, take a puff of their smoking weed, and without washing their hands, proceed with the operation. I do not mean to say that all Spanish surgeons do that, but that a good many do it. These things were mentioned in Gibraltar, Malaga and Granada, and the physicians, on the whole, do not enjoy good reputation in Spain, and yet, that country has many progressive men who desire to hold high the standard of medical knowledge. The proof of which, may be the fact, that the $1,000 prize established at the 12th International Medical Congress, at Moscow, in 1897, for medical work of the greatest benefit to humanity, has been awarded to Professor Ramon y Cajal, of the University of Madrid, for his researches on the minute structure of the nervous system.

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[1] Read before the Obstetrical Section, Buffalo Academy of Medicine, September 25, 1900.

I believe I saw more goitre in Spain than in any other part of the world, especially in the mountain districts, as in the Sierra Nevada range, and I noticed that quite a percentage of people had large appenditures at the throat. I made inquiry as to the cause of it, and water was made the scapegoat for the goitre. I do not know whether this is so or not, but some authors mention water as an etiological fact of this enlargement of the thyroid, especially the water of the Alps of Switzerland and the Apennines in Italy; in fact, water in every mountainous district is supposed to have the quality of producing this condition. I have been in the Alleghanies and Adirondacks, but have not noticed goitre so much on the American continent.

The medicines of Spanish apothecaries are made entirely different from those of other parts of Europe and our own country, and the drug stores are all very small. I believe it is advisable for an American traveling in the Pyrenean peninsula to be provided with a small traveling medicine chest.

Now let us cross to another continent just for a moment. It is but a few hours from Europe to Africa at the Strait of Gibraltar. And yet, in that short time, we seem to have been transferred to an entirely different world. If you care to see anything of oriental life, you need not go to Smyrna or Cairo. Less than two weeks journey from Buffalo will bring you to a place where you can have all of Eastern customs you want for some time. Just for a moment let me describe to you a town of several thousands of barbarians, dirty, ill-fed, half naked, and dwelling in abominable huts, and together with their beasts of burden occupying the only room, which is as large as a good-sized dry goods box. The streets being so narrow that hardly two people can pass each other, unpaved and uncleaned, ever smelling in the hot African sun, tend to produce nausea in the uninitiated. The filthiness of the streets, the sight of the barbarian people, ever yelling and quarreling, the braying of the asses, the unbearable odor of decaying matter, would without doubt be sufficient warranty for Dr. Wende, if he ran Tanjers, or Tetuan, or any of the cities of Northern Africa, to have them declared a nuisance, and have them razed to the ground. And yet the health of the coast cities of Mediterranean Africa is on the whole very satisfactory, thanks to the advantages of the climate, whereby the heat of the almost torrid sun is alleviated by the winds which blow from the ocean and the Mediterranean sea.

Morocco was at one time one of the leading educational countries of the world. Here lived and practised for a time the great physicians and fathers of medicine, Avicenna, Averroes and others, and as in other oriental countries, so also here, the priests are also a kind of medicine men. It is a great honor to be able to touch the mantle of a medical Moor, and a very highly prized privilege to be able to kiss the toe of a priest physician, for, by this grace, all diseases are banished from the fortunate man who has been permitted to do the dirty kissing act. How nice it would be if some of the honors which medical men possess among the Arabs, Moors and Beduins could be transferred here!

Let me make another jump; this time to Italy. The physicians there, especially in the southern part, seem to have only two agents in their pharmaceutical reservoir: castor oil and quinine. The first for everything for which the second is not used, and the second wherever it appears that a laxative cannot be used very well for any reason. The Roman fever, known in and about Rome, as the "febre aestivo-autumno," seems to be the scapegoat for most of the medical ignorance. There are many physicians in Italy, in fact too many, according to the complaints of doctors there, for Italians suffer as we in the United States of too many medical doctors in proportion to the necessities of the population.

There are twenty medical schools, colleges and universities in the country of the Cesars, having 6,386 students in the last academic year (1899-1900), running from 2009 in the University of Naples, to 15 in the free University of Ferrara. Notwithstanding the great complaints of the Italians, we are much worse than any other country in that respect, for we have six times as many physicians here as there are in Italy in proportion to the population, and on the same ratio and proportion, four times as many medical men as France, five times as many as Germany, and almost thirty times as many as Russia.

Here let me deviate a little from my tour. In 1899, there were only 18,334 physicians in the Russian Empire, though the population of the same was 128,932,173, while we have in America over 125,000 physicians, practising among about 75,000,000 inhabitants. And even though there are proportionately few medical doctors in Russia, and only six medical colleges, yet since January 1, 1900, to prevent any hyperproduction, a law has come into effect whereby in the first year of medicine no more than 100 students are to be admitted in the universities of Warsaw and Kazan, 200 in the University of Kieff and Charkow, and 250 in St. Petersburgh and Dorpath. This is truly a sensible, a wise, and I would say a humane law. For, is there a physician practising anywhere in this country, or even a layman, that is a non-professional man, who after due consideration will not admit and say that the 156 medical schools in the United States could be reasonably and with perfect safety for the profession, and for the country at large, be reduced to about 25? And that the 24,119 medical students who attended these 156 schools in 1899 are by far too many for the needs of the country. In 1898, there were graduated

5,725 men and women with the degree of Doctor of Medicine! Shades of Hippocrates and Galen! If this proportionate increase of medical doctors should continue much longer, where will they all make their living? Surely not by practising medicine. And similar conditions of medical men are also in Europe.

But enough of philosophising. Journey with me. to Austro-Hungary. I will not detain you at Vienna, most of you have been there, studied there, or have read of the medical schools and the prominent medical men and of the Hapsburg capital's large and rich and well arranged hospitals. I will take you, for a moment, further north of the Empire. Cracow, in Galicia, formerly the capital of Poland, but a few miles from the Russian and German frontiers, has a very old university. In fact, a celebration of a quin-centennial jubilee took place in June last. The medical department, though by the bull of Pope Urban V., in 1364, was to have been organised at once, as the words of the act are plain in this respect: "Scholas debitas ex nunc ordinamus pro legendo jure canonico vel civili, *medicinis* vel artibus liberalibus," was not opened for a certainty until 1433, thus making it one of the oldest medical schools in the world, which have been continued unceasingly until the present time, teaching our science and progressing 'pari passu' with ideas of the various epochs and times. It was one of the humane schools from its very beginning, as one of its rules adapted early was, "that no distributor or giver of poisons, nor one who is an abortionist, whether by herbs, drugs or manipulations, can be a doctor of physic, under the pain of punishment by fire of hell." The school has now 67 teachers in various branches of medicine, about 350 students, 6 university clinics, each in a separate, classical, large modern building; one hospital, and nine institutions, in which are located the various scientific laboratories and museums. It was not my intention to lay so much stress on this university, but the fact, which I have mentioned, of its existence over five centuries, forced me to speak especially and to dwell a little longer on this medical school.

Now, another long jump, as I turn among my notes. Hotel Dieu, also Salpêtriere, in Paris, very large and well known hospitals, of which no doubt everyone has heard, are nothing else, in my humble opinion, than poor houses for the sick of Paris and neighboring country. I always believed that these institutions were something grand, up-to-date, modern hospitals. They are not; they are overcrowded, unclean, and do not, as a rule, impress a medical man with their antiquated arrangements. But enough; in closing my remarks, I will say that these are but a few observations, taken at random, from my note-book and from the lingering vivid memories from lands across the sea.

508 Fillmore Avenue.

OBSTETRICS VIEWED FROM A GYNECOLOGICAL STANDPOINT.[1]

By CHARLES E. CONGDON, M. D., Buffalo.

INASMUCH as one half of our gynecological operations are for the restoration of injuries, or the cure of the results of infection following parturition, it may be well to make an earnest and energetic inquiry as to the best methods to be used, that will be most effective in modifying this large percentage.

Most of us can remember when we depended solely, in our surgical work, upon antiseptics; we can also remember the results—infection, pus formation, pyemia and death from trivial operations. Today, in most of our best regulated clinics asepsis is the rule, with the result that there is no infection, no pus formation, scarcely a death, even in our major operations. If the same technique could be used in obstetrics that is, for instance, in a vaginal hysterectomy, I am convinced that no infection would take place.

If all lacerations of the cervix or of the vagina, both anterior along the urethra, as well as posterior in the sulci, or, as occasionally occurs, into the bowel, or tears of the vulva, were promptly repaired, a large measure of misery, both immediate and remote, would be spared our women and fewer would be brought to the gynecologist.

The question naturally arises, where lies the fault? and from my observations I am led to the belief that many of our good men allow lacerations to pass unannounced without repair, because of the fear that a knowledge of them would cause a reflection on their skill. I do not believe that it is a lack of knowledge on the part of physicians practising obstetrics. I have since learned from experience it is the ignorance, superstition and stupidity of the laity that is the sole cause of their morbidity in the majority of cases.

Very few households will permit the practice of well-organised and disciplined maternity work. This I learn not only from my own experience, but from that of many others. How are we to overcome this? It is very difficult and uphill work for a few men to teach the masses; but it seems to me, that if we were to institute a united effort, that it would be possible to teach our patients in such a manner that they would forget their present ideas and consider us more than mere midwives, if we could teach them that they are to be cared for from the time of conception until involution; that we can do much to relieve the discomforts of pregnancy; that by frequent urinary analysis we may be able to render them less liable to eclampsia; that cleanliness is next to Godliness; that their beds should not be made or covered with old quilts or carpets, or with soiled linen, but with linen fresh from the iron; that the patient should have an enema sufficient to unload the bowel before the second stage of labor; that the vulva should be thoroughly shaved and scrubbed and kept closed with a sterile napkin; that in the primipara, with rare exception, lacerations occur; that irrigation, medicated or unmedicated, is harmful; that self examination is interdicted; that the physician is the better judge of the competency of the nurse; that the proper time for the resumption of household cares and duties does not depend on the number of days, but upon the condition of the patient, which should not be before involution has taken place; and, last, but not least, the patient should submit herself within two months after labor to a most careful examination, and if any defect is found it should be immediately repaired; if, I say, we would do all this, I am confident we would evolute at least a notch in the right direction.

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[1] Read before the Obstetrical Section, Buffalo Academy of Medicine, September 25, 1900.

1034 JEFFERSON STREET.

Abstracts.

THE LIGATURE AND VALUE OF DRY STERILISED CATGUT.[1]

By J. H. CARSTENS, M. D., Detroit, Mich.

FINALLY, the profession found that silk was the best for that purpose, and so for the first half of the 19th century virtually only silk was used. During the last quarter of that century, with the advent of abdominal surgery, requiring ligatures to be buried and beyond reach after the external wound had healed, the trouble began. Silk was a foreign body and would often cause fistulæ, and the profession looked around for other material, and even used various metals, but they were generally found wanting. Then animal ligatures of various kinds were tried. The greatest trouble with these has been to make them absolutely sterile. Every kind of animal tissue from the tail of the kangaroo to the fascia lata of the deer has been used and again dropped.

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[1] Author's abstract of a paper read at Louisville, Ky., September 20, 1900, before the American Association of Obstetricians and Gynecologists.

I have tried the different kinds of catgut ligatures, koumoled, formaldehyded, chromocised, and always found something wrong. The great objection that I had to all these ligatures was that they *last too long*.

It really seems too absurd to me, when I hear men talking about using twenty, thirty or forty-day catgut, as though it made any difference whether it lasted ten days, twenty days or two months. If the parts are not *healed* in a few days or a week, they will not heal in a month, if you simply hold them in apposition with the ligature. When I have taken out pieces of ligatures weeks and months after being put in place, I have become perfectly disgusted with the various sutures.

Still, catgut is just the ideal ligature that we want in abdominal surgery. Again and again I have approached the subject and experimented, but have often become discouraged. Reverdin, Docderlein and others, recommended dry sterilised catgut, but no good apparatus could be had until I heard some years ago about the dry sterilised catgut, as prepared by Boerckmann. The only thing that I did not like was to use oil paper or paraffin paper for the purpose of, in a way, oiling the ligature. That is just what I did not want in a ligature. What I wanted is a *plain, pure animal fiber*, as small as possible or as fine and as light as possible, to hold the parts in apposition for a few days or to control a bloodvessel.

After I had sterilised some, I was astonished how strong the catgut was after being subject to an intense heat. First using some pretty heavy, then I began to use it lighter and lighter and finally got down to No. 3 of the finest German catgut. (Ten strands of ten feet each in a box, is the way I got it.) This I used for tying the pedicle and bloodvessels, and it is more than strong enough for that purpose. For fine work, that is intestinal surgery or to sew the peritoneum together, I use only No. 1 or No. 0. For instance, in operating for appendicitis, that is amply sufficient in strength, as agglutination of the peritoneum takes place so rapidly.

I prepare these ligatures myself (although they are now in the market) in the following manner: The catgut is put in ether for a few days or a week until the fat is all removed and then cut in strips of 18 or 20 inches long. Three of these are wrapped in fine tissue paper. This is then placed in a small envelop, the latter closed, then placed in the Boerckmann steriliser and subject to dry heat for three hours. The thermometer is kept in the apparatus, so that you can see that the heat is at least 300 degrees. At the expiration of that time the heat is shut off and the ligatures remain in the apparatus without disturbance for twelve to eighteen hours, which gives any spores that may be present an opportunity to develop. Then the heat is again used and the ligatures are subject to another 300 degrees.

No contamination can take place while they are in the envelop, unless the envelop becomes moist. I have had a package in my satchel which I carried all over Europe, and whenever anybody wanted to try it, I gave them a couple of envelops. The envelops were loose, came in contact with all kinds of things, but were kept dry, and when I returned I made bateriological tests and found that the catgut was still absolutely sterile.

I have repeatedly tested this catgut and always found it absolutely sterile.

The points I want to make about the dry sterilised catgut ligatures are the following:

1. All buried sutures ought to be absorbable.
2. All absorbable ligatures must be absolutely sterile.
3. Chemicalised sutures are no more sterile than plain sutures.
4. A suture that is chemicalised is harder and remains longer in the tissues.
5. This latter is no advantage but a disadvantage. If in a special case it is desirable that a suture should remain longer, dry sterilised kangaroo tendon can be used.

THE USE OF MERCUROL IN URETHRITIS.

RAMON GUITERAS in *The Lancet* (London, England, September 22, 1900,) states that he has thoroughly tried mercurol in his clinic, and from his experience has drawn certain conclusions which he presents in his paper. After describing the chemical nature of mercurol, he states that he found the weaker solutions had little effect and the stronger solutions were at first irritating. He finally concluded that the average strength best borne by the patient is ten grains to the ounce, or approximately 2 per cent. After having reached this conclusion he had the histories of 100 cases recorded, in 33 of which an examination for the gonococcus was made, revealing its presence in 30 cases. In the remaining 67 cases a clinical diagnosis was depended upon, since the writer considers the experienced eye competent to recognise the disease. In one extremely interesting case no gonococcus could be found in the urethral discharge, although gonococci were present in that of some venereal ulcers on the glans.

In these cases a 2 per cent. solution of mercurol was ordered which the patients were directed to inject three times a day, after micturition; the injection to be held within the urethra for five minutes at each operation. The clinical reports of the cases show that frequently in two days after beginning the use of mercurol, gonococci could no longer be found in the discharge.

The author discusses at some length the value of the term "practically cured," and sums up his argument by saying that to draw conclusions of value we should consider only cases that have been under treatment for three or more weeks, omitting those making but a few visits. On this basis he eliminates all but 65 cases from his report and tabulates these as follows:

Ten cases were cured in two weeks, or 15 per cent.; fifteen cases were cured in six weeks, or 23 per cent.; twenty cases were practically cured, as there was no discharge, though there were some shreds in the urine at the end of from four to eight weeks, 30 per cent.

One of the most valuable observations that the writer has made is the fact that only two cases suffered from complications, one having developed gonorrheal rheumatism and the other epididymitis. He states that this fact in itself would tend to argue much in favor of the use of mercurol, for where is there any other solution or mixture which does not show a greater percentage of complications? When we consider that many writers claim that epididymitis occurs in 20 per cent. of all cases of urethritis, the rate of 1 per cent. reported in this series of cases argues much in favor of mercurol as a harmless, yet efficient injection.

Another interesting feature is that in only one of the 100 cases was there any marked posterior urethritis. Therefore, it would seem that mercurol quickly destroyed the gonococcus, lessens the severity of the inflammation, and tends to prevent the development of complications. From a comparative study of the different methods of treating gonorrhea, the author concludes that treatment with mercurol is an advance beyond the older methods with balsamics and astringent injections.

HYDROZONE AND GLYCOZONE IN GASTRIC AND INTESTINAL DISTURBANCES.

W. H. VAIL, (*Medical Mirror*, December, 1899.) says: I have for a long time been rather enthusiastic over the value of hydrozone and glycozone in treating diseases, and can attribute much valuable assistance and extraordinary results from their use in the last few years.

I was called to treat a young man, suffering from a severe gastro-enteritis. I found him in a most serious condition, having been delirious for three days. His temperature was sub-normal, 97.6, pulse 60, respiration 16. He was greatly emaciated, atonic, had inappetence, a severe agonising pain in the stomach and intestines, at times so severe that he would sit on the edge of the bed and groan, oftentimes, yell. These attacks were always of a similar nature and occurred regularly. He was unable to take either solid or liquid food, even in small quantities without causing a return of the pain, a teaspoonful of milk being sufficient to produce it. His condition was pitiable. His cheeks were hollow, eyes congested, skin pale and sallow and his whole appearance showed the presence of intense pain.

I saw him at the end of the third week of his illness and determined that hydrozone and glycozone were the remedies indicated, therefore, I gave him, at once one-half glass of a mixture of one-half ounce of hydrozone with a little honey to one quart of water. He was somewhat disturbed for a while after the potion, but was soon relieved. I continued to administer this for some time, with only a slight improvement, but after several doses had been taken, the relief was very decided. After his nourishment, I gave one teaspoonful of glycozone in a wine glass of water. After a few doses of this, he was very much easier and, at midnight, fell asleep and slept all night not awakening until morning, the first sleep that he had had in five days. I had previously discarded all other remedies, of which there was a large number, as one after another was given with no benefit. All of the acute symptoms disappeared in a few days, at which time, he felt very much better, and he continued to improve without having a recurrence of any of his old severe symptoms. Before this, I had increased both the nature and the quantity of his food which he relished greatly. I continued the hydrozone and glycozone for a month after, to entirely reduce the inflamed condition of the mucous membrane of the gastro-intestinal tract. These two remedies have afforded me the most excellent issues many times in the treatment of gastric and intestinal disorders.

Hydrozone causes destruction to microbes, has no deleterious action upon animal cells, possesses no toxic qualities, exerts no corrosive effect upon healthy mucous membranes when used in diseases caused by germs, is a pus destroyer and a stimulant to granulating tissues.

Glycozone while not so rapid in its action as hydrozone is, nevertheless, just as sure a stimulant, and in all gastric and intestinal disorders, exerts a potent and uninjurious effect upon the diseased mucous membrane of the stomach, healing to a nicety. It is an effective oxidizing agent, has an agreeable, sweet, and at the same time, slightly acid taste, resembling lemonade. Its use produces no deleterious action on the heart, liver or kidneys.

Clinical Reports.

TO REMOVE BURNT POWDER FROM THE SKIN.

By A. EVERETT SMITH, B.S., M.D., Olean, N.Y.

PHYSICIANS who have had the experience of slowly picking powder burned and driven into the face by accidental or premature explosion will appreciate the following method by which it can be removed rapidly and completely in a few minutes. I do not recall reading of any one having used this method and it was only the force of circumstances by which I accidentally discovered it.

July 3, 1899, I was called to see C. S., aged about 7 years whose face was burned and filled with powder by the explosion of a giant fire-cracker. I found my colleague, Dr. M. C. Follett, of this city, at the bedside, who stated that the child's eyes were probably ruined and his face would be permanently disfigured, since it would be simply impossible to pick all the powder out. Dr. Follett having an urgent call elsewhere left me to attend to the child's eyes. I soon discovered it was impossible to do anything without general anesthesia and requested the family to have Dr. Follett meet me an hour later. It was then late in the day and darkness came on before we could meet, so we deemed it best to wait until morning.

The next morning or some fifteen hours after the accident, we placed the child under chloroform anesthesia, and I proceeded to wash the face preparatory to the picking job, I thought was before me. Soap and water, with a coarse towel took off the blackened outside layer of the skin loosened by the burn and inflammatory process, when to my surprise I found it quite easy to wash and rub away the powder from the tissue thus exposed. Afterward with an oily dressing to exclude the air, the case made an uninterrupted recovery with scarcely a black mark in his skin.

My conclusions are in all similar cases, best results will be attained by leaving patient for ten or twelve hours until the serum from the inflammatory process forms, then give a general anesthesia and scrub the parts thoroughly with soap and water.

107 SOUTH BARRY STREET.

BLOOD CURE OF CHRONIC GASTRIC CATARRH.

By T. J. BIGGS, M. D., Stamford, Conn.

SAMUEL A., aged 34 years, English; admitted to hospital June 2, 1900. Diagnosis: chronic gastric catarrh. The case was sent to me by Dr. R., he having given up all hope of doing anything for it himself. Prior to being treated by Dr. R., the case had been in St. Luke's Hospital for six months, but had received little or no benefit. The general symptoms presenting were: loss of appetite, disagreeable gnawing, and, at times, fulness in the stomach; tenderness at the epigastrium, slightly influenced by eating; almost constant prominence of the epigastrium from distension by decomposing gases. The patient has occasional attacks of nausea and vomiting, occurring most frequently on arising, consisting of gray mucus, raised after great retching; constant thirst; often great burning at the pit of the stomach; bowels constipated; urine high colored. There was a constant feeling of mental depression, and sleeplessness, with occasional attacks of vertigo. The patient also had a follicular pharyngitis of an aggravated type. He was very thin, muscles relaxed, and the skin dry. On entering the hospital he was so weak that he had to be carried from the ambulance on a litter.

His secretions were regulated and he was put on an absolute bovinine diet, half a teaspoonful every hour in lime water and peptonised milk. Once in twenty-four hours he was rubbed thoroughly with olive oil. The follicular pharyngitis was first treated by cleansing the surface with bovinine-Thiersch, followed by spraying the bovinine pure, this being employed every three hours.

On June 10th, the patient felt stronger, was sleeping well, and was not so depressed mentally, burning in the pit of the stomach greatly reduced, no vomiting, but still present nausea and constant thirst. The bovinine was now increased to a tablespoonful every two hours, and the treatment of the pharyngitis reduced to twice in 24 hours. June 20, the patient was up and about, feeling much stronger, having gained five pounds in weight. The constant thirst had disappeared, as well as the nausea. He also craved some general diet. He was, however, perfectly nourished and did not complain of being hungry, only thought he would like to try and eat something. This was not as yet allowed. June 22, however, his condition still being on the gain, he was allowed a little rare beef, well chopped, and a piece of toast. This he ate with relish, and retained it without any discomfort. Treatment continued.

June 23, the follicular pharyngitis had entirely disappeared. He was allowed some rare chopped beef, a little rice and toast. June 25, he took a long walk and on returning, said he felt splendidly. On the 28th, he was discharged cured, with the advice to continue the bovinine and to report for examination at the end of a week.

The action of the bovinine in this class of cases, as in all others of a similar kind, is: it gives the alimentary tract absolute rest, and at the same time supplies perfect nutrition, containing as it does adequate elements in the proper proportion to sustain the human organism.

Society Proceedings.

BUFFALO ACADEMY OF MEDICINE.

Section on Ophthalmology, Otology, Rhinology and Laryngology, September 17, 1900.

REPORTED BY GEORGE F. COTT, M. D., Secretary.

DR. F. WHITEHILL HINKEL, the chairman elect, opened the meeting with a few well-chosen remarks thanking the section for the honor conferred.

The chairman called attention to the necessity of having a separate set of by-laws to govern this section.

Upon motion of Dr. A. A. HUBBELL, the following order of business was adopted: Reading of minutes; presentation of cases and exhibition of specimens; reports of committees; unfinished business; new business (including nomination and election of officers); reading of papers and discussion; adjournment.

Motion of Dr. A. A. HUBBELL—Nomination and election of officers to take place at regular meeting in month of May each year and a notice thereof be sent out with regular postal card notice. Carried.

Dr. G. F. **Cott** presented a larynx which he had removed from a woman 63 years of age, suffering considerable pain, especially during the act of swallowing; had coughed for two years, but did not notice any serious symptoms until about six months ago. About that time Dr. Hebenstreit saw her and prescribed for her. From the general appearance he thought she had carcinoma of the larynx. In March of this year Dr. Hintz was called in and he in turn consulted with Dr. King, who also made a diagnosis of carcinoma. Dr. King asked me to examine the woman and I found her as above described. The larynx was covered with a yellowish exudate, anterior surface infiltrated and left arytenoid very much swollen, large glandular enlargement on left side of neck. April 11, 1900, the larynx was removed at Riverside Hospital, with the assistance of Drs. Jacob Meyer, King and Thompson. The larynx was removed in twenty-eight minutes. The esophagus was stitched to the skin laterally and the trachea to the skin anteriorly to prevent exudate from running down into the bronchi. Wound was then packed. Patient did apparently well, but died suddenly two hours later.

Dr. F. W. **Hinkel** had observed five or six cases which were operated upon, the first one was a brilliant success, the rest died within a short time. His experience taught him never to urge operation for carcinoma of larynx.

Dr. Hinkel suggested that proper apparatus for examination of patients be procured. Dr. Bennett said that the council had given section permission to get whatever they needed.

Dr. A. L. **Benedict** read a paper entitled,

EYE STRAIN OR GASTRIC REFLEX—WHICH?

The writer, while admitting the possibility of vomiting, headache, and the like, as a result of eye-strain, considered that dyspeptic trouble of any duration, characterised by these symptoms, was apt to be of independent origin. He believed that the oculists of Buffalo shared this view as so many patients had been referred to him for treatment of digestive conditions, which might have been retained by the oculists if they held the ideas of eye-strain, sometimes attributed to this specialty. A number of cases were cited, mainly of gastric subacidity, but including hyperchlorhydria, gastric catarrh, due to hepatic sclerosis, gastric dilatation, gastroptosis, with movable right kidney, etc. As is the experience of specialists in gynecology and, probably other specialties, he had not been able to connect definite symptoms with definite gastric conditions, except for certain minor details.

Dropping the term eye-strain in its usual sense and using it merely to signify overwork of the eyes, whether normal or subject to refractive errors, he believed that the nausea and vomiting of scorchers was due largely to eye-strain, on account of the effort to focus on the road while subject to the vibration of the bicycle, and also on account of the rapid changes of illumination as from the sun shining through the pickets of a fence or through the waving branches of trees. Persons using their eyes excessively in viewing landscapes from trolleys or steam cars, in watching theatrical performances, or in any other way, were liable to gastric reflex. Sick headache, generally characterised by failure of hydrochloric acid and organic acidity, instead of by hyperchlorhydria, as often thought, was frequently due to eye-strain in the same sense, though not invariably as has been declared.

Discussing the physiology of gastric symptoms from eye-strain, Dr. Benedict called attention to the fact that special sense excitations as such, did not cause nausea unless the sense of sight or of equilibrium was affected. Even nausea from irritation of taste and smell was essentially psychic, as shown by persons eating with relish and without nausea such substances as high meat, Limburger cheese, onions, and the like. The control of equilibrium was largely due to sight and these two senses were closely connected in the corpora quadrigemina and geniculata. Dr. Benedict was somewhat sceptic as to the supposed function of the semicircular canals and believed that many ideas of equilibrium were due to pneumogastric endings in the liver and possibly in the stomach. The inertia of the liver adapted it to this purpose and elevator sickness, nausea from swinging in hammocks, etc., showed the susceptibility of the system to nausea from irregular movements of the liver. On the other hand, quite violent and irregular movements of the head alone, do not usually produce nausea.

In reply to a question as to statistics, the writer said that he had abandoned the attempt to prepare them, as they would amount practically to saying whether patients did or did not wear spectacles. As so few eyes were perfect, the demonstration of refractive error was not a satisfactory explanation of nausea, headache, etc., unless the patient recovered rapidly from the latter after using glasses, and unless the absence of organic digestive trouble was demonstrated physically. However, he made it a practice to refer patients for examination of the eyes, unless they had been recently refracted.

DISCUSSION.

Dr. C. G. **Stockton** felt some hesitation in opening the discussion since he did not grasp the conclusion reached by Dr. Benedict. It is no doubt very valuable, but he did not quite understand the paper as to the conclusion. Dr. Benedict did not go quite far enough as to therapeutic values regarding eye-strain. In the beginning of my career I had many disappointments in treating eye-strain, hence have modified very much my conclusions as to causation, relief, and the like. I profited first by suggestions of Dr. Hinkel, who called my attention to the matter. But things are more clear to me now, and I firmly believe that eyestrain is often the cause of disturbances of the stomach. There is, however, no one thing the cause, but a number of them together; four or five might do no harm, but add the sixth and you find the disturbance to occur. Refractive errors cause stomach and intestinal trouble from astigmatism, ametropia, and muscular errors. People suffering from such troubles have also other causes like over-work, lessened oxygenation, worry, sexual life, etc. Four factors may come together without causing an explosion, then adding the fifth and the mischief is done; eye-strain is one of those factors, and patients get better when eye-strain is relieved, but that is generally not enough to relieve all the symptoms; the others must receive separate attention. The eyes must be watched, of course. Some affections as those of railroad men, hysterical subjects, and other causative factors are sometimes hard to relieve, often even impossible. I consider it an important matter to have eyes corrected when there is stomach trouble.

Dr. A. G. **Bennett**—The ophthalmologist is hardly in position to discuss this question. He sees his patient usually but a short time and then refers him again to his physician. Many cases of eye-strain, however, have been relieved by the ophthalmologist's efforts alone of which I have ample evidence. Of course, all cases are not due to eye-strain. The most brilliant success was a case of hypophorea.

Dr. A. A. **Hubbell**—Dr. Benedict seems to mean that reflex stomach trouble is not due to eye-strain at all. His definition of eye-strain I take exception to. He says eye-strain is over-work. It is true we understand it to be overwork in another sense, to much work on muscles through some errors of refraction or motility, which leads to various reflexes. I take a medium ground on the subject which must be studied from all points and some one thing will bring to a climax. Vomiting may be caused by refractive error. The cases are very complex and must be clearly studied. On many points I agree with Dr. Stockton and Dr. Bennett. These patients generally go back to the general practitioner.

Dr. L. BURROWS related a case of anisometropia, referred to him by a general practitioner; the peculiar condition of the stomach is generally associated with it.

Dr. F. W. HINKEL—From personal experience I know of relations existing between stomach and eye; the eyes are susceptible to irritation by the stomach. The stomach produces some form of toxemia causing difficulty in the use of the eyes.

Dr. A. A. HUBBELL—Dr. Benedict is right in his statement of the myope. The ciliary muscles are not relaxed to the utmost and the stimulus of convergence and accommodation taken off. Most myopes are conscious of eye-strain.

Dr. J. J. FINERTY—Dr. Hubbell, I would like to have you show me some cases. If eyes don't diverge there is no strain.

After some remarks by Dr. Blaauw, Dr. Benedict closed. He felt gratified at the free discussion.

Number of fellows present, 23.

Section on Obstetrics and Gynecology, September 25, 1900.

REPORTED BY WM. G. RING, M. D., Secretary.

THE regular monthly meeting of this section was held at the Academy rooms, Tuesday evening, September 25, 1900, at 8.30 p.m.

The meeting was called to order by the chairman, Dr. A. J. COLTON, at 8.45 p.m.

The minutes of the previous meeting was read and approved.

Dr. C. E. CONGDON read a paper on Obstetrics, Viewed From a Gynecological Standpoint. (See page 260.)

The paper was discussed by Dr. GROSVENOR, who protested against the recommendation that vaginal irrigation should be practised before the birth of the child in obstetrical cases.

Dr. WM. G. TAYLOR asked if repair of cervical lacerations was advisable immediately after labor, and suggested that the use of chloroform in the second stage of labor had in his practice prevented, to a large extent, lacerations of any variety.

Dr. **Stephen Y. Howell** said that the paper was full of meat and contained many valuable suggestions. He recommended close attention to cleanliness without regard to surroundings of patient. He thought that many obstetricians, even prominent ones, were at times very careless in regard to introduction of septic matter, and cited a case where he was called and found the physician dipping blood from the bed with an ordinary kitchen dipper; was greeted with a hearty hand-shake, and the same hand almost immediately was introduced uncleansed into the vagina of the patient. Germs are often carried into the vagina from unclean labia and mons. In lacerations the wounds are gaping for both venous and lymphatic infection and should be closed as soon as possible. Dr. Howell recommended the reading and publishing of such papers as that just read by the essayist.

Dr. C. E. Congdon, in closing, pointed out to Dr. Grosvenor that he had misunderstood him; that his views were the same as that of the paper; that he was very much pleased with the reception of his essay and its discussion; and stated that if only the physician had full charge and also the selection of the nurse, it would make a difference of 50 per cent. as regards results in obstetrics. Personally, the essayist had not been successful in preventing lacerations by use of chloroform. He agreed with Dr. Howell in his remarks.

Dr. **Francis E. Fronczak** read a paper, entitled, A Few Glimpses, Mostly Medical, of Lands Across the Seas. (See page 255.) He related some of his experiences in the Azore Islands, Spain, Gibraltar, Africa, Italy and Austro-Hungary.

The paper was discussed by Drs. Congdon, Grosvenor and Krauss.

Dr. **Henry J. Dowd** reported a case of vaginitis.

Number of members present, 26. Meeting adjourned at 9.30 p.m.

Progress in Medical Science.

THERAPEUTIC NOTES.

Edited by NELSON W. WILSON, M. D., Buffalo, N. Y.

FOR DELAYED RESOLUTION IN PNEUMONIA.

VERY often in pneumonia one finds resolution rather backward. In such cases the following treatment, Dr. DaCosta's method of procedure, will be found to be of great benefit and in the majority of cases will bring about a splendid result. First apply small blisters over the affected area, and give the following:

℞	Iodide of potassium	4.00	ʒi.
	Muriate of ammonia	6.00	ʒiss.
	Compound licorice mixture	180.00	℥vi.

Mix. Dose, one tablespoonful four times a day.

PROSTATIC HYPERTROPHY.

The following, which is recommended by the *Revue Médicale*, has been used in three cases of prostatic hypertrophy. In one case it gave no benefit whatever. In the other cases there was apparent relief almost immediately. The case in which failure is recorded was one of long standing.

℞	Sulficthyolate of ammonia	.33 to .78	gr. v. to xii.
	Cocoa butter	3.59	gr. liv.

Make into one suppository.

FOR PULMONARY TUBERCULOSIS NIGHT SWEATS.

This formula, used as a lotion, is reported by Kohnstamm as being very efficient in the night sweats of pulmonary tuberculosis:

℞	Balsam of peru	1 part.
	Formic acid	5 parts.
	Chloral hydrate	5 parts.
	Trichloracetic acid	1 part.
	Absolute alcohol	100 parts.

DIARRHEA IN CHILDREN.

Dr. C. G. Keeley, in treating diarrhea in children confines himself to the use of castor oil, calomel, bismuth subnitrat and opium. He withdraws milk diet almost wholly and gives, in ordinary cases:

℞	Subnitrat of bismuth	1.00	gr. xv.
	Aromatic syrup of rhubarb	.18	m iii.
	Water to make	4.00	ʒ i.

For one dose. Repeat every hour.

FOR RINGWORM.

Two very serviceable prescriptions for ringworm are the following. This from the *Jour. de Médicine de Bordeaux*, has been very successfully used:

℞	Epicarin	4.00	ʒi.
	Venetian talc	4.00	ʒi.
	Starch	4.00	ʒi.
	Vaseline	12.00	ʒiii.

Make into ointment and use externally.

From the Canada *Medical Record* is this. In some cases it may be made stronger.

℞	Salicylic acid	.66	gr. x.
	Vaseline	4.00	ʒi

Make into ointment and apply twice daily.

FOR FISSURED NIPPLES.

One of the best prescriptions which can be used for this condition is given in a recent number of the Canada *Medical Record:*

℞	Compound tincture of benzoin	8.00	ʒii.
	Listerine	16.00	ʒiv.
	Camphor water, to make	90.00	℥iii.

Directions—Bathe nipples and apply freely after each nursing. Shake. Label.

FOR SMALL CUTANEOUS GROWTHS.

Unna's treatment for small cutaneous growths is simple. As reported by the *Medical News*, Unna gives this prescription to the patient who makes frequent applications to the growth:

℞	Paraformaldehyde	1.00	gr. xv.
	Castor oil	.52	m viii.
	Collodion	20.00	ʒv.

TO ABORT BOILS.

Dr. Ochme, in the *Medical World*, covers the affected area freely with collodion, containing from .03 to .13 (gr. ss—ii.) of salicylic acid to the dram. This application is repeated two or three times in twelve hours.

Another abortive method which is used with almost miraculous results is the application of electricity to the area, after painting freely with colorless tincture of iodine. This is particularly desirable where abscess formations are present on the face.

ENURESIS.

Dr. M. G. Price in the Canada *Medical Record* has by using the following, in a majority of cases, succeeded in overcoming this most rebellious of troubles:

℞	Tincture of belladonna	.33	gtt. v.
	Fluid extract of ergot	.66	gtt. x.
	Tincture of nux vomica	.33	gtt. v.

Mix for one dose; repeat four times a day.

NERVE TONIC.

The St. Louis *Clinique* highly recommends the following as a most efficient nerve tonic:

℞	Asafetida	4.00	ʒi.
	Arsenious acid	.03	gr. ss.
	Strychnine sulfate	.03	gr. ss.
	Ext. sumbul	2.00	℈ iss.
	Subcarbonate of iron	2.66	℈ ii.
	Valerianate of quinine	1.33	℈ i.

Mix and make into 24 capsules.

Dose—One capsule after each meal.

MYALGIA.

This affection in unusually trivial as to duration and consequences, but often is such a source of discomfort to the patient that a ready remedy is welcome:

℞	Fluid extract cimicifuga.		
	Fluid extract coca.		
	Ammoniated tincture of guiac, of each,	4.00	ʒi.

Dose—A teaspoonful three times a day.

—*Jour. Am. Med. Association.*

POWDERS FOR TRIGEMINAL NEURALGIA.

The *Riforma Medica* gives the following formula:

℞	Extract of cannabis indica	7½ grs.
	Salicylic acid,	75 grs.

Divide into ten powders. One to be taken three times a day.

The opposition to the use of antipyretic drugs in fevers seems to be diminishing. O. Rosenbach (*Brit. Med. Jour.*) advises phenacetin or antipyrin (0.25 gm, not more than 0.50 in one day) six or eight hours before the expected rise of temperature in typhoid.

Marfan (*Jour. de Med. de Paris*) considers lactation a contra-indication to the following drugs: Opiates, atropin, hyoscyamus, colchicum, arsenic, cocain, chloral, lead salts, which are precipitated by milk, digitalis, ergot, antipyrin, the last three only relatively.

A. Napier claims that 50 per cent. of sheep's thyroids are histologically abnormal. While it may be doubted if so large a proportion of American flocks are diseased, and while minor abnormalities may have no therapeutic significance, it is worth while to bear in mind the need of caution.

G. Frank Lydston (*Ther. Gaz.*) states his experience with santonin in epilepsy. He does not claim permanent cures, buf a marked control of convulsive attacks, and considers santonin far superior to the bromides. He begins with 2 to 5 gr. and increases to about 20 gr., three times a day. He watches the urinary secretion for evidences of overdose.

FOR A TICKLING COUGH.

One very often meets with an annoying condition wherein the patient complains of a "tickling in the throat which makes me cough constantly." This will be relieved by the following:

℞	Codeine	.065	gr. i.
	Phenacetine	.78	gr. xii.
	Powdered licorice	1.065	gr. xvi.
	Sugar of milk, a sufficient quantity.		

Make into 8 powders. Dose—Dissolve one in mouth every hour.

Correspondence.

MEDICAL MIRROR PRIZE CONTEST.

St. Louis, Mo., October 11, 1900.

To the Editor Buffalo Medical Journal:

Sir.—Thanking you for whatever attention you may have shown our previous request in regard to the announcement of our tuberculosis contest, we shall appreciate very much your attention to the a change of date of closing. At the request of many prospective contestants it has been decided to change the date of closure of entries to at least November 15th. This does not mean that the final date for receiving entries has been changed, for it still remains February 1, 1901, the prizes to be distributed by the committee on awards on March 1, suceeding. We feel that our effort is one of unusual liberality and any editorial comment you may make upon it will be appreciated.

THE MEDICAL MIRROR.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges should be addressed to the editor: 284 Franklin Street, Buffalo, N. Y.

Vol. XL.—LVI. NOVEMBER, 1900. No. 4.

THE WILLIAM PEPPER MEMORIAL VOLUME.

A MEMORIAL volume dedicated to the memory of the late Dr. William Pepper has recently been published by some of his former students, under the leadership of Dr. Alfred Stengel, of Philadelphia. It is a noble act reflecting credit and honor alike on the William Pepper Laboratory of Clinical Medicine and on the Phœbe A. Hearst foundation, at the same time perpetuating the name and fame of Dr. Pepper in one more special way.

Dr. William Pepper was a many-sided man and in no position did he excel more than in that of his chosen field surrounded by bright, active, energetic young men. He was a steadfast friend to the younger element of the profession, and this volume testifies to the esteem in which he was held by these same active workers, associated with their master in the investigations conducted at the William Pepper Laboratory of Clinical Medicine. No better memorial could be erected to their chief, than this volume of original research, which reflects so much credit on all participating in its publication.

Very appropriate is the beautiful frontispiece, a steel engraving of Dr. Pepper, with a copy of his autograph underneath, printed on heavy plate paper. The likeness is an excellent one and was taken a short time before the doctor's death.

The contributors have chosen subjects in which they have shown superior excellence and portrays the character of work done at this laboratory. The table of contents embraces the following papers: Two cases of muscular dystrophy with necropsy; and a case of amyotrophic lateral sclerosis, in which degeneration was traced from the cerebral cortex to the muscles, by William G. Spiller, M.D.

A contribution to the study of (*a*) iron infiltration in the ganglion cells; (*b*) Forced movements due to cellular degeneration of the cerebellum following rattlesnake poisoning, by D. J. McCarthy, M.D.

A fatal case of sulphonal poisoning, by Alonzo Englebert Taylor, M.D., and Joseph Sailer, M.D.

Melanotic sarcoma of the spinal cord, by Joseph Sailer, M.D.

Studies in leukemia, by Alonzo Englebert Taylor, M.D.

On the pathology of the erythrocyte, by Alfred Stengel, M.D.

The Restitution of the blood plasm following intravenous saline injections after hemorrhage, by A. E. Taylor, M.D., and C. H. Frazier, M.D.

The influence of immoderate water drinking upon metabolism and absorption, by D. L. Edsall, M.D.

An experimental study of the etiology of appendicitis, by Charles H. Frazier, M.D.

Primary endothelioma of the left superior pulmonary vein, by Joseph Sailer, M.D.

A clinical method for the estimation of breast milk proteids, by George Woodward, M.D.

The etiology of pertussis—the bacillus of Czaplewski-Hensel by Joseph Walsh.

A list of the previous contributions from the laboratory completes this volume of 479 pages, every one of which is valuable and instructive.

Some of the articles are handsomely and profusely illustrated, notably those by Dr. Spiller, Dr. Sailer, and that on experimental appendicitis, by Dr. Frazier.

The director of the laboratory, Dr. Alfred Stengel, deserves much credit for the excellent care shown in the selection and character of articles and for the general appearance and typography of the volume.

"A FEW KIND SENTIMENTS."

THERE is a bizarre sort of a publication issued at East Aurora which sails under the name of *The Philistine* and which is a vehicle for the spleen of a literary harlequin, who, as editor and publisher, makes use of it to advertise himself and to variously attack people dead and alive, and exploit his "beliefs." His name is Elbert Hubbard, and he likes to be called Fra Elbertus.

As a rule the JOURNAL has no liking for digging into the dirty linen of any literary rag shop, yet the October issue of *The Philistine*, in the interests of decency and honor, demands attention. A great many copies have been sent out recently to those who are not subscribers, and physicians have been the chief recipients. The reason for this is apparent for Mr. Hubbard devotes some space to an attack upon Dr. George M. Gould, of Philadelphia, whose works as a writer are well-known, and whose standing as a physician is among the highest.

Dr. Gould was a subscriber to the *Philistine* and he purchased at times books published by Mr. Hubbard. Then, at one time Mr. Hubbard made public in the *Philistine* his "beliefs" concerning christian science and in such manner and wording as to be distinctly offensive to every physician whom he had the good fortune to bear upon his subscription books. Dr. Gould is a forceful and fearless man, dignified and learned, and he wrote Mr. Hubbard a personal letter, returning books by Walt Whitman and Rossetti, in which he said:

> As to "christian science," you have no right to "belief" concerning matters which you have not studied five minutes, and you have less right to voice your "belief." If I ever pretended to have a "belief" about a matter of the most expert inductive science (surgery of the stomach, construction of dynamos, spectrum analysis, etc.,) and to publish that belief when it utterly and absolutely contradicted the opinion of every expert in those sciences, I should hope I would be silenced for my egotism and impertinence. There are one million men in this country who make a life work of the study and cure of disease. You, who have never studied medicine ten minutes, assume to pronounce true what every one of the one million educated physicians can only laugh at as the idiocy of "belief."
>
> Why don't I write you pleasant letters? Because you are all wrong, and have sold your real "beliefs" and independence to the demon of popularity, whom you affect to scorn.

In printing this letter Mr. Hubbard, prefaces it with the statement that it is a private letter and is printed without comment. Then, after violating all the journalistic rules of decency and honor by giving to the reading-public a letter which he considers private—no matter how Dr. Gould looked upon it—Fra Elbertus, let us call him, for his vanity's sake, plunges into a string of abuse of Dr. Gould, because he cancelled his subscription to the *Philistine* "all on account of an innocent little article that expressed a few kind sentiments about our christian science friends," as it is writ by Fra Elbertus. In concluding his attack on Dr. Gould, this man of rag-time literature, who airs his christian science "beliefs" in the *Philistine*, which, by the way, was originally published by a few bright men as a real periodical of protest to stab fraud and puncture the "queer" foibles of the odd side of humanity, and expresses "kind sentiments" concerning as unholy a sect as ever masqueraded and plundered under the cloak of religion, says:

> In closing, that I may not be remiss, I wish to thank Dr. Gould for the delicate, though unintentional compliment he pays me in linking my name with that of Walt Whitman and Dante Gabriel Rossetti. To form a trinity with two such men as these has always been quite beyond my fondest hopes. But I am grateful, yes grateful, even tho Rossetti was a victim of "drugs" as Dr. Gould, with allopath accuracy observes. Personally, I do not believe in drugs, and that is my sole offense and cause of this chilly feeling which Dr. Gould entertains toward me. Yet the fact that Rossetti died a victim to the drug-habit will, I trust, on second thought, commend him to the doctor. And possibly, drugs or no drugs, it may not be out of place for me to add that I would rather be wrong and go to hell with Walt Whitman than to be right and play a harp in heaven alongside of Dr. George M. Gould, whose office is at 1631 Locust Street, Philadelphia, Pa.

And he might have added with that unctious, hypocritical grace for which the crowd, which received his "few kind sentiments" is noted. "And here endeth the first lesson."

The JOURNAL is not in accord with Dr. Gould's ideas in many matters of professional dispute, but we are in accord with him thoroughly and heartily in his independence in cancelling his subscription to any publication which defends or even sentimentalises over christian science. It is no discredit to him to suffer attack at the hands of Mr. Hubbard—Fra Elbertus, for vanity's sake; but being a man prominent in the world of letters and medicine, we presume he is at the mercy of such as have attacked him. The only error he has committed is that of writing a personal letter to a Fra Elbertus, without knowing in advance that it would be violated. Mr. Hubbard may prefer christian science support to the friendship of the medical profession. Under the circumstances, he deserves it. It's the worst punishment one could wish him. As to his preferences concerning his location in the hereafter, we have nothing to do. The medical profession labors to save life and to prevent disease; the hereafter is a matter of personal choice and Mr. Hubbard has declared himself. Yet what can we expect from a man who publishes a private letter on one page and on another brutally attacks a dead woman, whose life was beyond reproach? Mr. Elbert Hubbard, of East Aurora, who calls himself Fra Elbertus, does this in the same issue of the *Philistine*, and he damns himself as a ghoul of the most disgraceful type, who digs down into the grave of Mrs. Henry Ward Beecher, and drags her forth from her shroud to ridicule her and the intense love she bore her husband. Is it any wonder that such a man choses hell as his future abode? It is the eternal fitness of things.

THE *Galveston Tribune*, at the time of the great storm which nearly submerged that city, had in press a very handsome publication, entitled "Picturesque Galveston." It is a book of something over a 100 pages, printed on 80-pound coated paper, filled with views of this, one of the most beautiful cities in the world.

The editor, Mr. Clarence Ousley, announces that the *Tribune* has tendered the profits of this publication to the Galveston Relief Committee, and under their auspices the book will be sold to the general public at $2.00 a volume.

This is a worthy object and appeals to the better side of human nature. Orders for the book should be addressed to the *Galveston Tribune*, and checks made payable to the same.

PERSONAL.

DR. ERNEST WENDE, of Buffalo, was elected president of the American Electro-therapeutic Association, at its recent meeting held at New York. The next annual meeting will be held at Buffalo.

DR. A. A. HUBBELL, of Buffalo, was elected vice-president of the New York State Medical Association, at its late annual meeting held at New York City.

DR. THOMAS LOTHROP, of Buffalo, was recently elected president of the board of managers of the State Normal and Training School, vice David F. Day, deceased.

DR. AUGUSTUS G. POHLMAN, U. of B. Class, 1900, house physician at the Deaconess's Hospital, has been appointed an instructor in anatomy at Cornell University. Dr. Pohlman has gone to Ithaca and entered upon his new work.

DR. WILLIAM B. MAY, of Buffalo, has been appointed by Health Commissioner Wende an inspector of milk in the health department, vice Dr. John H. Grant, resigned.

DR. L. S. MCMURTRY, of Louisville, attended upon invitation the 22d annual meeting of the Chicago Gynecological Society, on Friday, October 19, 1900. At the dinner held at the rooms of the Athletic Association, he responded to the first toast on the list,—The Blue and the Gray.

Dr. John A. Miller, M.Sc., Ph. D., F.C.S., of Buffalo, analytical and consulting chemist, has removed his office and chemical laboratory to Nos. 44 and 45 Lewis Block, 13½ East Swan Street, Buffalo. Dr. Miller is chemist to the State of New York.

Dr. John W. Cameron, of Buffalo, announces the change of his residence and office to 305 West Utica Street. Office hours: 7-9 a.m. and 7-8 p.m.

Dr. Charles T. Crance, U. of B., 1900, formerly assistant surgeon Soldiers' and Sailors' Home, at Bath, has become a member of the surgical staff of the Fitch Hospital, at Buffalo,

Dr. Sidney A. Dunham, of Buffalo, who has been spending a few weeks in New York, studying nervous diseases at the Vanderbilt clinic, as announced in the Journal for September, has returned and resumed his professional practice.

Dr. P. W. Van Peyma, of Buffalo, recently returned from a three-month trip in Europe, where he attended the International Medical Congress, the Paris Exposition, and otherwise was entertained during a pleasant vacation.

Dr. John H. Grant, of Buffalo, was on October 15, 1900, appointed assistant commissioner of agriculture for the Ninth Division. Dr. Grant retains his residence in Buffalo.

Dr. E. Wood Ruggles, of Rochester, announces his removal to 294 Alexander Street in that city, where he will limit his practice to skin and genito-urinary diseases. Hours: 10-1; 2-4 and 7-8. Telephone 4741.

Dr. Oran S. Smith, a homeopathic physician of Union Springs, N.Y., has been appointed by the trustees, assistant surgeon at the Soldiers' Home, Bath, N.Y.

Dr. W. G. Spiller, of Philadelphia, professor of nervous diseases at the Polyclinic, read a paper at the Academy of Medicine before the section on medicine, Tuesday evening, October 9, 1900, entitled, The involvement of the nervous system in malaria. Previous to the meeting Dr. Spiller was entertained at dinner at the Fillmore, by Drs. Julius Ullmann and A. E. Woehnert. Among the other guests were: Drs. Charles Cary, Roswell Park, Eli H. Long, William C. Krauss, Chauncey P. Smith, James W. Putnam, Eugene A. Smith, Grover W. Wende, H. U. Williams, F. S. Crego, Irving M. Snow, A. A. Jones, DeLancey Rochester and William Warren Potter.

OBITUARY NOTES.

DR. JOHN W. ROBINSON, of Lyons, N.Y., died suddenly of some affection of the heart, October 21, 1900, aged 57 years. He was a graduate of the College of Physicians and Surgeons, New York, Class of '67.—DR. J. L. CUTLER, of Boliver, N.Y., died at his home October 14, 1900, aged 71 years. He was a graduate of the University of New York, Class of '50. He held many local offices, among which was examiner for pensions during eight years.—DR. CHARLES ST. JOHN of the Class of '98, who went to the Philippines as an acting assistant surgeon, U. S. Army, is reported to have died near Manila of typhoid fever early in October.—DR. CHARLES ROEMMELT, of Elmira, U. of B., '98, died July 20, 1900, while serving as acting assistant surgeon, U. S. Army, in the Philippines.—DR. SAMUEL SMITH PURPLE, one of the older and most respected physicians of New York City, died at his home September 29, 1900. He presented to the New York Academy of Medicine some years ago 4,000 volumes, which formed the nucleus of its present splendid library. Dr. Purple retired from active practice about fifteen years ago.

SOCIETY MEETINGS.

THE Medical Union was entertained in the Colonial Parlors of the Genesee, Wednesday evening, October 3, 1900, by Dr. L. B. Dorr, at which time Dr. Ernest Wende read a paper entitled, The recent epidemic of rabies. The attendance was large. Dr. E. Wasdin, Surgeon M. H. S., was present as a guest.

THE New York State Association of Railway Surgeons will hold its next annual meeting at the Academy of Medicine, New York City, Thursday, November 15, 1900, under the presidency of Dr. J. L. Eddy, of Olean. Dr. C. B. Herrick, of Troy, is the secretary.

The Esculapian Club was entertained by Dr. C. J. Reynolds, at his home, Thursday evening, October 18, 1900. Dr. W. B. Saltsman read a paper entitled, How to treat urethral stricture. Dr. F. H. Stanbro, of Springville, was present as a guest.

The Mississippi Valley Medical Association will hold its next annual meeting at Put-in-Bay, Ohio, September 10-12, 1901. The officers for the ensuing year are: President, A. H. Cordier, Kansas City, Mo.; vice-presidents, C. F. McGahan, Aiken, S. C., Charles L. Minor, Asheville; secretary, Henry E. Tuley, Louisville, Ky.; treasurer, Dudley S. Reynolds, Louisville, Ky.; chairman of committee on arrangements, J. C. Culbertson, Cincinnati.

The Niagara Falls Academy of Medicine held its regular monthly meeting at the office of Dr. J. H. Miller, Falls Street, on Monday evening, October 1, 1900, at 8.45 p.m. Dr. W. H. Potter read a paper entitled, The uses of boracic acid.

The Buffalo Academy of Medicine held meetings during the month of October, 1900, as follows:

Section on Surgery.—Tuesday evening, October 2d. Program: Traumatic insanity, with report of a case trephined twelve years after injury—recovery, Sidney A. Dunham. Discussion by Drs. Henderson and Brownell. Cholelithiasis, Herman E. Hayd. Discussion by E. A. Smith, Roswell Park, and others.

Section on Medicine.—Tuesday evening, October 9th. Program: On the involvement of the nervous system in malaria, with a report of a case of malaria presenting the symptoms of disseminated sclerosis, with necropsy and exhibition of slides, W. G. Spiller, professor of nervous diseases, Philadelphia polyclinic. Discussion opened by Charles Cary and James W. Putnam.

Section on Pathology.—Tuesday evening, October 16th. Program: An inquiry into the existence of malaria in Buffalo and its environs. Sub-title—Report on mosquito distribution and blood examinations, Irving P. Lyon. Modern theory of the actions of the toxins and antitoxins, G. H. Clowes, Ph. D., Biological Chemist to State Laboratory.

Section on Ophthalmology, Otology, Rhinology and Laryngology.—Monday evening, October 22d. Program: The tonsil as a portal of infection, Julius Ullmann. The treatment of chronic tonsilitis, Frederick H. Millener. A case of congenital ocular defect (?) Edmond E. Blaauw.

Section on Obstetrics.—Tuesday evening, October 23d. Program: Personal experience with uterine fibroids, H. D. Ingraham.

COLLEGE NOTES.

At the Medical Department, University of Buffalo, the class of 1901 held its election in alumni hall, October 22, 1900, when the following-named officers were elected: R. E. P. Trevett, president; Roy G. Strong, vice-president; J. W. Reilly, secretary; W. W. Carleton, treasurer; T. M. Leonard, historian; J. A. Weidman, prophet; W. R. Paterson, orator; O. W. Steinlein, marshal; G. M. Hall, T. E. Spalding, G. H. Davis, J. B. Frisbee, executive committee.

The Dental Department of the University of Buffalo, in response to what appears to be an urgent need, proposes to organise a course of post-graduate bacteriological study, under the direction of Dr. William G. Bissell, to begin about the 1st of February, 1901, provided a sufficient number of practitioners will, in advance, enroll themselves as members of the class. It will not be attempted otherwise.

The instruction will be given in the evening, in the bacteriological laboratory of the college on Goodrich Street, and all the apparatus, microscopes, etc., belonging to it will be in use. The course will be about as follows: not less than six lectures and twelve evenings of laboratory work of two hours each, will be included. The lectures will be upon the following subjects:

(1) The bacteria—their general characteristics, morphology, chemical composition and vital phenomena; (2) Bacteriological technique, including the manufacture of media, the study of cultures, etc., etc.; (3) Infection and immunity; (4) Disinfection and sterilisation; (5) Bacterial pathology, general and special; (6) The hygiene of transmissible diseases.

The laboratory course will include the personal study and observation through methods of culture, staining, etc., of the most important organisms, including oral forms, pus-producing bacteria, bacillus of tetanus, bacillus tuberculosis, bacillus of diphtheria, bacillus typhosus, micrococcus of sputum, septicemia, etc., etc. A complete knowledge of the methods of proliferation with exhaustive studies of these and other organisms will be given.

Any one who desires to join such a class or to sustain such a course should, as soon as possible, communicate, either personally or by letter with the Dean, Dr. W. C. Barrett, at the college, as considerable time is necessary for the preparation of the material, and nothing will be done unless a sufficient number of practitioners offer themselves as members. Dr. Barrett's college hours are from 3 to 5 p.m.

This, we believe, is the first time an organised post-graduate course in bacteriology has been attempted, and we have no doubt of its success under the management of such an accomplished lecturer as Professor Bissell. The fee for the course is only $10, which is very reasonable, and brings it within the reach of all, leaving no excuse for declining the course on account of its expense.

Book Reviews.

A TREATISE ON APPENDICITIS. By JOHN B. DEAVER, M. D., Surgeon-in-Chief to the German Hospital, Philadelphia. Second edition. Thoroughly revised and considerably enlarged. Illustrated, with 32 full-page plates. Octavo. Philadelphia. P. Blakiston's Son & Co. 1900. [Price, $3.50, net.]

A new edition of this famous work is welcomed by the profession. Surgeons are always interested in the literature of this important malady, which is now generally recognised as essentially a surgical disease. Physicians, too—we mean those who do not practice surgery—are scarcely less interested, for, speaking generally, it is they who see the cases first and must early determine not only the time of operation, when operation becomes necessary, but who shall be the operator.

This treatise has been practically rewritten, since every chapter bears traces of new work and much additional material has been incorporated. As might be anticipated in a work by this author, it is particularly strong in its anatomical descriptions. Several hitherto undescribed landmarks for the surgeon are noted, and the plates, showing the appendix and its environs from several points of view, are simply superb. The section on pathology, too, deserves special mention. This, the author says, was prepared by Dr. A. O. J. Kelly, director of the pathologic institute of the German Hospital. The classic and aberrant forms of appendicitis are well described, including the catarrhal, tubercular, interstitial, ulcerative, carcinomatous and gangrenous varieties, together with their complications. Diffuse or generalised peritonitis and chronic appendicular peritonitis receive due attention, and their significance is well accentuated. The old fashioned "inflammation of the bowels" is no longer heard of as a pathologic entity, and these have taken its place, giving an intelligent expression of symptoms to correct pathologic bases; substituting, indeed, precision and certainty, for a former guesswork, which was almost always wrong.

The section on diagnosis is an attractive part of the book. It is especially interesting to the general practitioner. It informs him that ordinarily the diagnosis of this affection is unattended by special difficulty, but it also points out, by a carefully prepared dissertation on differential diagnosis, how he may arrive at a reasonable degree of certainty in doubtful or obscure or complicated cases. In treatment he is told that the most important immediate remedy is the exhibition of a laxative, whereas formerly it was supposed to be the first duty of the physician to administer an opiate. Here is a complete change of front in practice, based upon observations at the bedside and at the operating-table. If the symptoms are not relieved by laxatives it is time to begin preparations for surgical interference, and to be always ready, even in the presence of the most passive symptoms, to invoke the aid of the knife whenever the first danger signals are hoisted.

In his description of the several operations Deaver is clear and precise; the language used is free from high sounding phrases, but convinces the reader that the author is thoroughly familiar with his subject, and knows what he is writing about. He is teaching something that he has learned by experience, and announces conclusions reached by perhaps the largest series of operations of any surgeon in the world. A word should be spoken for the illustrations. The plates are some in black and some in colors, but all are specimens of an artistic excellence, an accuracy rarely seen. They add much to the intelligence as well as beauty of the volume, which, mechanically speaking, is beyond criticism.

This treatise may be regarded as the last word on appendicitis and represents the sum of our knowledge relating to that disease up to the moment of its issue. It is written by a master of the subject and reflects great credit upon American Surgery and American Surgeons.

THE TREATMENT OF FRACTURES. By CHARLES LOCKE SCUDDER, M. D., Surgeon to the Massachusetts General Hospital, Out-Patient Department; Assistant in Clinical and Operative Surgery in the Harvard Medical School: assisted by FREDERICK J. COLTON, M. D. Large 8vo, pp. 432, with 585 illustrations. Philadelphia: W. B. Saunders. 1900. [Price, $4.50 net.]

FRACTURES. By CARL BECK, M. D., Visiting Surgeon to St. Mark's Hospital and to the New York German Poliklinik. With an appendix on the Röntgen Rays. Octavo, pp. 335; 178 illustrations. Philadelphia: W. B. Saunders & Co. 1900. [Price, $3.50, net.]

It is unusual to be called upon to prepare notices of two such excellent treatises on fractures published within a few weeks of each other by the same house. But it is a subject that will bear considerable additional material at this time, for it has been some years since a work has appeared upon fractures. We have depended upon what has been said in works on general surgery for description of novel methods that may have been applied to the management of these injuires, and this has been somewhat meager in character. The discovery of the *x*-ray and its application to surgery has contributed considerably to improvements in diagnosis in doubtful cases, and thus methods of treatment have become modified in consequence.

Dr. Scudder, in his treatise, pays great attention to detail, first with reference to diagnosis, and next with regard to treatment. These both are very important. This is a department of surgery that taxes the skill and ingenuity of the surgeon more than any other. Every effort should be put forth to restore a fractured bone to its former usefulness and thus prevent or limit that maiming and unsightliness which result from careless or unskilful treatment, especially of fractures of the extremities.

Perhaps no injury has occasioned more perplexity than Colles's fracture of the radius. It is common, causes maiming and deformity when not properly or adequately treated, and is a constant menace to a surgeon's reputation when unskilfully or imperfectly handled. This author gives most excellent description, advice, treatment and illustrations regarding this troublesome injury. Many other fractures are equally well described and illustrated, but it is unnecessary to enumerate them here. The elbow when injured is another bête noir of the young surgeon, and here will be found much clear instruction relating to it.

The *x*-ray is described in its application to diagnosis of fractures. Massage is another subject of interest in relation to treatment, one perhaps not sufficiently appreciated or insisted upon by surgeons here, but abroad, on the other hand, it is carried to an extreme that would seem unadvisable.

The *x*-ray apparatus is expensive and not easily available outside of hospitals, hence the practical nature of this treatise in giving detailed instructions as to physical examinations, as well as the most elaborate illustrations of dressings will be appreciated by the surgeon in smaller cities and rural centers.

Dr. Beck's work is less pretentious than Scudder's and perhaps not as helpful in many respects. It, however, goes into the application of the *x*-ray more extensively, the author being an enthusiast on the subject. He dedicates his book to Professor Röntgen and classes his discovery as one of the greatest of the age. He asserts in the recognition of fractures "accuracy takes the place of ignorance and doubt, and painful manipulations cease to be necessary for diagnostic purposes."

This author lays stress upon massage when properly employed as an adjunct to treatment. Fixed dressings and the ambulatory treatment are duly considered and accorded their appropriate place in the management of fractures. Beck lacks precision in description in some instances, which detracts from the practical character of this work and might mislead the student or young surgeon. It, however, will be better understood by the surgeon of experience who will not be misled by want of detail. If we may be permitted to express our opinion on this point, we should say that the author's enthusiasm for the *x*-ray had somewhat overshadowed his judgment, hence he has paid too little attention to detailed physical examinations of the injuries with which he deals. The book, however, is a valuable contribution to the literature of surgery and every surgeon will be eager to possess it.

These two books have issued so nearly together that we have ventured to group them in this notice. Not since Hamilton's classic and Stimson's practical working treatise, has anything appeared more welcome to the surgeon who treats fractures than these two books. Each has its special points of excellence, and both will be considered valuable additions to the literature of bone injuries and their treatment. Mechanically, the books are quite similar and are beyond criticism in their dress and illustrations.

THE IRRIGATION TREATMENT OF GONORRHEA. Its Local Complications and Sequelæ. By FERD. C. VALENTINE, M. D. Illustrated. New York. William Wood & Company. 1900. [Price, $2.00, net.]

Dr. Valentine states in the brief preface of his "little book" (220 pages and 57 illustrations, some original and some unique,) "that his object was to fill the irrigationless chasm ('hiatus') existing in medical works and patiently wait until abler pens supply the missing link." Hastily glancing through the opening chapter another motive suggests itself. Under the heading "General Considerations" he quotes Goldberg's and other reports to show that 90 per cent. of cures, in fourteen days, is claimed for the irrigation treatment of gonorrhea.

The author also alleges that not a dozen men in the world were using the irrigation treatment in 1894. This statement is certainly rash, as more than that number were using it in Buffalo, and Buffalo is a small part of the world, smaller even than her ambitious citizens thought, previous to the last census. Previous to this time Rona, Janet, Feliké and Guyon, in Europe and others in America had exploited catheterless methods of irrigation of the lower urinary tract.

He states that the so-called "Valentine Method" of treating gonorrhea, is "erroneously misnamed;" that he "did nothing except devise a simple apparatus, develop the technique, modify the medication, render the rules precise and write many articles," which profusely illustrated his device. (Price, $6.50.)

Sure, this was more than nothing, hence an exception was taken. The doctor is diffident. Under the caption, "The Irrigator," there follow six pages of description and cuts, decorated with figures and letters, to make plain the use and manner of use of this simple apparatus. With chain and pulley he hoists his petard 8 or 9 feet high, which gives a hydrostatic pressure of about ½ lb. per square inch for each foot, total pressure of 4 or 5 lbs. To offset this he devises a shut off to control the pressure; not only this, but he also attaches a saucer-dish shield to the nozzle to catch the water forcibly ejected from the urethra. The urethra and bladder resent the impact of forced injections, just as the bowel rejects the forced injection of an enema.

The shield, pulley, chain, elaborate shut-off and controller are expensive, cumbersome and fulfil no useful function. To irrigate the anterior urethra, abundance of irrigant and sufficient force to open its lumen are necessary. For irrigating the urethra in sections the author directs that the penis be grasped so that the distal ends of the fingers press upon the urethral canal in order that by opening one finger after another the wash is done in sections, resembling perhaps the fingering of a flute.

For irrigating the anterior urethra the patient stands or sits upright, holds the glass nozzle in the urethra while abundance of water gently flows into this canal and runs out around the instrument, or through the outflow of a double tube.

To irrigate the deep urethra and bladder the body should be supported in a semi-reclining flexed dorsal position for the purpose of relaxation. The relative position of the neck of the bladder is changed at least half an inch by various postures. Animals hump the back and flex the thighs when emptying the abdomino-pelvic emunctories for the relaxation induced thereby. In this position, with a column of a hot (90° to 120° F.) saline solution dilating the urethra, a rhythmic vermicular, a retroperistaltic action is induced, which sucks or swallows the fluid into the bladder. This result may be delayed on the first trial, and in that case straining, as if to urinate, will bring it about. This knack or control is readily acquired. Force or pressure is not necessary and is often harmful. Forceless irrigation is the treatment for acute cystitis.

On page 158 is shown "Patient in Position during Dilatation," with a Kollman dilator. At first glance it looks like a person swinging in a hammock. The body is slightly flexed at the hips. This position serves no useful purpose, it is neither fish, flesh, nor fowl.

The lithotomic posture with the back raised, thighs flexed and legs supported at right angles with the thighs, relaxes the pelvic supports and attachments of the bladder and gives freedom for manipulation.

Dr. Valentine is aggressive, progressive and well up in the literature of genito-urinary medicine. The title of his book gives an inadequate idea of the many good things contained therein. In spite of its faults it is a valuable work and an addition to the subjects discussed. It should find a place in every medical library.

B. H. D.

SUGGESTIONS TO MEDICAL WRITERS. By GEORGE M. GOULD, M. D. Duodecimo, pp. 185. Philadelphia: The Philadelphia Medical Publishing Co. 1900.

Of all the works which bear the name of Dr. Gould as author, and there are many, none is more valuable, more interesting than this little volume. It is little in size, but big in scope. In no work is Dr. Gould's forceful writing seen to better advantage than in these "Suggestions to Medical Writers," and the most interesting thing about it all is the charming abandon which he exhibits as he plays hob with the vast army of etymologomaniacs—those poor, narrow-visioned beings who rail at the advance in medical orthography, still spell hemorrhage with a diphthong; and claim that "pathological" is "scientific," not wanting to admit what, in their hearts they must know, is correct. Dr. Gould naively asks why it should not be "scientifical." The greatest crime in medical literature today is what Dr. Gould calls a "hodge-podge of Latin and English." There is too much straining for effect; too much sky-rockety exhibition of "scientifical" learning, which when it is all sifted out is in many, many cases neither fish, flesh nor fowl, but a sort of a literary hash of questionable origin. I will confess I am on the mourner's bench today. When I picked up this book for review it was with the idea that it had fallen to my sorry lot to say things about a bit of work which at first glance struck me, to say the least, as being rather bizarre. I started in heroically and found myself deeply interested; and when a reviewer becomes interested he is much like a dramatic critic who is amused; he is no longer a critic, he is an adherent, an endorser, a friend. And from now on I am an humble follower in the footsteps of Dr. Gould, so far as medical English is concerned. He may be wrong in some of his views on other subjects concerning the profession, and in some he might with great grace appear as a reformer; but in medical English he is the leader and should be followed. It is going to be hard work for a lot of us, but it's going to make us consistent. We may not be gaudy and picturesque to the extent of flying a Latin flag on an English ship sailing under old Greek papers, but we will be honest. The introduction to the "Suggestions" is a brilliant bit of flail-flying and the "pernickety sticklers," as Dr. Gould calls the hardshell objectors to advancement, are held up to ridicule and left among the ruins of a mixed-pickle language, which has been through the etymologic rag shops of many centuries. There is quite as much humor as censure in the work; there is common sense pervading the atmosphere of every page and really a careful study of the book reveals very little which could be honestly criticised. Dr. Gould does not approve of foreign words, but there are some which one cannot very well help using. For instance, I said that he was naive. I could not with dignity and without sacrificing the great respect I have for him as a writer, say he was coy or cute, but I could say he was naive and I did—and he is.

The writing of prescriptions in good English is one of Dr. Gould's appeals. Every drug store in the city of Buffalo has several scrap-books, which are truly volumes of shame. They contain the hog-Latin prescriptions of practising physicians. Let me echo the refrain in Dr. Gould's book: "Stick to the English," and be honest.

Time was when the physician was a creature of supposedly supernatural attributes and his calling was a mystery. He wrote his prescriptions in ink carried in a horn at his girdle; and what a wonderful creation that prescription was, made up of odd, fantastic characters and symbols known only to himself and the alchemist,—another queer, old fossil who traded on the superstitions of a people steeped in the fog of medieval mysticism. Dr. Gould objects, with good reason, to the use of Latin in prescriptions. What is the use of it anyway? What is accomplished? Is it to keep from our patients the knowledge of the drug they are taking, or is it because we are in a rut, marked out by the sandal-shod feet of past centuries? In these days of public libraries with medical rooms we cannot conceal from a patient, if he desires to learn it, the fact that he is getting calomel when we write "hydrarg. chlor. mite."

How many doctors are there who can tell the origin of the ℥ and ʒ signs which have for years and years been in use? How many can tell what the ℞ means? A few years ago we were told in the medical colleges—some of them—that this sign was a contraction, or rather a profanation of the old zodiacal sign of Jupiter, and that it had come to us as a sort of a hand-me-down from the ancient physician who used to begin his prescription with what might very properly be termed a voodoo appeal to Jupiter, all of which is the veriest rot. While we must perforce in some cases stick to mercury, we ought to remember that Jupiter is a back number in prescription writing, and eliminate from our minds all the sleight-of-hand tricks which were practised centuries ago. The plea is made that a prescription written in Latin is standard the world over. If one is to practise medicine in a foreign country then Latin may be a necessity; but the number of men in this country who could pass the qualifying medical examinations in any foreign country on the face of the globe, would not make a decent sized crowd at an afternoon tea. An English speaking physician who writes a prescription in Dr. Gould's "hodge-podge" must appear much like the savage who imagines himself civilised, when he adds to his breech clout a plug hat and a liver pad picked up on the beach of his mid-ocean island.

Let the doctor of today read the chapters on Medical Paleography and Psychology of Words. He need not be too radical, but he can be sensible and he will be a writer of better English.

N. W. W.

A Manual of Syphilis and the Venereal Diseases. By James Nevins Hyde, A. M., M. D., Professor of Skin, Genito-urinary and Venereal Diseases, Rush Medical College, Chicago; etc, etc., and Frank Hugh Montgomery, M. D., Associate Professor of Skin, Genito-urinary and Venereal Diseases, Rush Medical College, Chicago, etc. Second edition revised and enlarged. 58 text illustrations and 19 full-page lithographic plates. Philadelphia. W. B. Saunders & Co. [Price, $4.00.]

The designating of this work as a manual is hardly correct; for while Saunders's Manuals have attained an unexcelled reputation, they are in the main looked upon and considered in the light of small, handy, little volumes, whereas Hyde and Montgomery is more. It is a comprehensive and fairly exhaustive work on syphilis and the venereal diseases, so it really is more than a manual—it is a work. Twice as large as the first edition, it shows revision and a great deal of work, being practically a new volume. The illustrating is far and away the most prominent addition,—that one can see it at a glance—and Saunders has shown a charming disregard for iron-bound tradition in this part of the work, which is but another evidence that a book bearing the Saunders' stamp is as nearly perfect as it is possible to make it. Many of the lithographic plates are those which were seen in the Handy Atlas series, in the Mracek volume on syphilis and venereal diseases, published in this country by Saunders. They are a distinct aid to the text, which explains most lucidly and in concise form the appearances and conditions met with in the affections considered.

The authors have practically rewritten the whole book, and that portion devoted to gonorrhea is in fact new. It has been brought directly up to date, and new treatments are accorded full space and consideration. Not only do they tell what they consider the best methods, but they exhibit all the others which have any standing.

Great care has been taken in the section on syphilis to take up each lesion and consider it, and then the special affections and complications are taken up, and their treatment most carefully discussed. The disorders which are not really venereal are given special attention. To many patients and some practitioners this will be a Godsend. Another department, too often slighted, is that concerning instrumentation of the urethra, and Hyde and Montgomery pay closest attention to it, advising and cautioning. There are in this section illustrations showing how to pass a sound. For the sake of the perfection of the book, these illustrations are necessary, and are, as they should be, photographic of the various movements; but, generally speaking, one cannot be taught to pass a sound by pictures however perfect. Dr. Agnew's advice was to "pass a sound on yourself, then try it on some one else."

If one were to be captious and overcritical, it might be said that the error which distinguishes all genito-urinary and venereal disease works was apparent in Hyde and Montgomery,—the slighting of gonorrhea in women. The effects of the diseases are far more reaching in women than in men, and the treatment is, of course, very different, yet mighty little space is, as a rule, given to the subject in any work which deals with venereal diseases. The claim might be made that it concerns gynecology and properly belongs in works devoted to that specialty. Probably; but the fact remains that it is a venereal disease and as such belongs in and should have extended consideration in books concerning genito-urinary and venereal diseases. The endless chain of pus tubes which adorns the records of the gynecologic wards of hospitals all over the country, is mutely eloquent of the lack of knowledge of proper treatment of gonorrhea in women.

Those pages which Hyde and Montgomery do devote to the subject are full of information and good advice.

The first edition of this work was valuable; this second edition is invaluable,—not to the specialist, but to the general practitioner. He will know a lot more after he has read it than he knows now, and the money he pays for it will be the best professional investment he ever made in his life. N. W. W.

A POCKET TEXT-BOOK OF CHEMISTRY AND PHYSICS. By WALTON MARTIN, M. D., and WILLIAM H ROCKWELL, JR., A. B., M D., of the College of Physicians and Surgeons, New York. In one 12mo volume of 366 pages, with 137 illustrations. Philadelphia and New York: Lea Brothers & Co. [Price, cloth, $1.50; flexible red leather, $2.00.]

Half of this volume is devoted to physics. While the section on chemistry is excellent as far as it goes, it is altogether too brief to be of much service either to physician or student, and physiological chemistry is practically omitted. One regrets that the entire book had not been given over to chemistry, or that physics had been given less space. M. J. F.

INTERNATIONAL CLINICS. A Quarterly of Clinical Lectures and Especially Prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Pediatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose and Throat, etc. Edited by HENRY W. CATTELL, A. M., M. D., Director of the Ayer Clinical Laboratory of the Pennsylvania Hospital. With the collaboration of John Ashhurst, Jr., M. D., LL. D., and Charles H. Reed, M. D., of Philadelphia; James T Whittaker, M. D., LL. D., of Cincinnati. Vol. II. Tenth Series, 1900. Philadelphia: J. B. Lippincott Company.

This volume is an interesting and instructive continuation of this valuable series, which has become a periodical of considerable proportions and importance. Among the home contributors to this issue we find the names of Edmund Andrews, Robert T. Morris, John B. Murphy, Charles A. Oliver, Edmond Souchon, and J. C. Wilson, living, besides that of Alexander J. C. Skene, recently deceased, all prominent in the literature of medicine. Among the prominent foreign contributors appear the names of J. W. Ballantyne, G. Dieulafoy, H. Senator, and Booth Mackenzie.

The subjects treated of in the book may be classified as follows: therapeutics, seven; medicine, ten; neurology, two; surgery, nine; obstetrics and gynecology, nine; diseases of the eye and ear, eleven; and dermatology, one. Besides these there is a description of the kromskop, by Henry W. Cattell. This is an instrument for reproducing a picture in lights, shades and colors, which was invented by Mr. Frederick E. Ives. The value of such an instrument, made practical, is obvious to every laboratory worker. A kromogram of an ovarian cyst appears as a frontispiece, and it certainly is a beautiful specimen of photography in color.

The book closes with an article entitled, The 1900 meeting of the American Medical Association, by Guy Hinsdale, which is a résumé of a portion of the work done at Atlantic City last June. It is stated that Drs. John Ashhurst, Jr., and James T. Whittaker, both lately deceased, bestowed their last literary work on this book. As associate editors or collaborators, these gentlemen exercised their judgment upon a number of articles, as to the propriety of their appearance in the pages of the clinics. This number well maintains the high standard of excellence already established by this quarterly publication.

ON THE PREVENTION OF EYE ACCIDENTS OCCURRING IN TRADES. By SIMEON SNELL, F. R. C. S. Edin., Ophthalmic Surgeon to the Royal Infirmary, and Professor of Ophthalmology in the University College, Sheffield. London: Bale, Sons & Danielsson, Ltd., 83–89 Oxford street, W. [Price, 1 shilling.]

This reprint from the *Brit. Med. Jour.* of Dr. Snell's presidential address before the section of ophthalmology of the British Medical Association, 1899, is a very tastily gotten up little book with parchment covers and uncut leaves. The subject matter is of interest to every ophthalmologist and general practitioner who sees so many cases of this sort. In calling attention to the constant menace to the eyesight many occupations involve, the author has performed a timely service and it is unfortunate that we do not have the subject more frequently discussed. The author describes his wire mesh eye protectors to be worn for various occupations. This is no better and probably would prove more tiring to the eyes than the mica eye protectors, worn to some extent in this country. This latter he does not mention.

The illustrations showing the implements used by workmen to remove foreign bodies and some of the occupations most dangerous to sight are interesting. R. H. S.

ATLAS AND EPITOMÈ OF GYNECOLOGY. By DR. OSKAR SCHAEFER, Privatdocent of Obstetrics and Gynecology in the University of Heidelberg. Edited by Richard C. Norris, A M., M. D., Gynecologist to the Methodist Episcopal Hospital and to the Philadelphia Hospital; Lecturer on Clinical and Operative Obstetrics, Medical Department University of Pennsylvania. 207 colored illustrations on 90 plates and 62 text illustrations. Philadelphia: W. B. Saunders & Co. 1900.

ATLAS AND EPITOMÈ OF DISEASES CAUSED BY ACCIDENTS. By DR. ED. GOLCBIEWSKI, of Berlin. Authorized Translation from the German, with Editorial Notes and Additions, by Pearce Bailey, M. D., Consulting Neurologist to St. Luke's Hospital, New York; Assistant in Neurology, Columbia University; Author of "Accidents and Injury; their Relations to Diseases of the Nervous System." Forty colored plates and 143 text illustrations. Philadelphia: W. B. Saunders & Co. 1900.

The man who writes a good book is an educator; the man who prints the book and gives it to the public is a benefactor. When Saunders first announced the publication of the Atlas Series, of which these two volumes are part, it was said that the volume would be as perfect as it was possible to make them. How well this has been done we all know, yet we cannot help admiring the exquisite book-work shown in the production of these volumes. They show the highest type of serviceable bookmaking. In scope they, as a class, stand midway between the dear old quiz compend of student days and the heavier text-books.

In the gynecology the illustrations are particularly valuable, being reproductions of water-color paintings made from fresh specimens by the best German artists. So well has this work been done that the student obtains from the plates a very excellent mental picture of the pathologic changes wrought by disease of the pelvic organs, which he could not get from any wordy description however well done, however clearly stated. There is added to this the kind of knowledge one absorbs from a study of the specimens or a visit to the clinic. The handling of the subject has been most admirable and thorough.

Anomalies of formation and arrested development begin the book, followed by changes of shape and position of the pelvic organs. Then inflammatory and nutritional disturbances are taken up, and considered in a manner almost wholly different from what we are used to in this part of the globe. The German thoroughness is everywhere apparent, especially in the closing chapters dealing with injuries and their consequences and new growths, which takes in the very extensive subject of tumors. The closing pages of the book are devoted to a very valuable therapeutic table which is such a splendid guide to every-day gynecological work.

In reviewing, or even casually examining the Atlas of Diseases caused by Accidents, one is forcibly reminded of the shortcomings of American medical education, which in the majority of colleges almost wholly ignore, or at best make incidental and passing references to the subject which this volume so clearly sets forth. This was referred to in the JOURNAL when Saunders's Atlas of Legal Medicine was reviewed, and again in an editorial article. In these days of negligence cases, when the number of lawyers who make a specialty of damage suits for personal injury is on the increase, when one half the jury cases in this country are tried for personal injuries, and when whole armies of factory employees are insured against accident by insurance companies by the blanket policy system, information, such as is set forth in this book is not only of great assistance to a physician or a surgeon, but is an absolute necessity.

The work, while primarily a medical book, is designed to be of aid to the legal fraternity and to the accident insurance companies. The introduction by Dr. Bailey, the editor, is intensely interesting. He shows in concise, temperate language, the difference between the German and American systems of law making to regulate accident indemnity. The German system which has been in force since 1884 permits of increase or decrease in indemnity as the patient gets worse or better. In this country, a jury, after hearing a raft of "expert" evidence by medical men who have been paid to swear to certain specific statements, gives a verdict for a fixed sum which settles the case.

To the general practitioner this atlas is the most valuable of the series, for it tells him things he does not know and cannot know, for he has never been taught them. Here are shown him in splendid, life-like coloring the result of injuries and operations; statistics are referred to at sufficient length to permit him to talk intelligently of the probable duration of disability following accident, and he is given a very good general working knowledge of what the amount of disability is and will be, all other things being equal. Dr. Bailey has added a great deal of American information to the translation, and there is no excuse for a medical man making an addle-pated exhibition of himself on the witness stand in an ordinary, everyday damage suit. The Atlas of Diseases Caused by Accident should have the largest sale of any of the Saunders' series, and a copy should be presented to the faculty of every medical college in the country which is ignoring the subject, to show them how they are not equipping medical students.

N. W. W.

PROGRESSIVE MEDICINE. Volume III., September, 1900. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in Jefferson Medical College of Philadelphia. Assisted by CHARLES ADAMS HOLDER, M. D., Assistant Demonstrator of Therapeutics in the Jefferson Medical College. Octavo, pp. 408, with 14 engravings. Issued quarterly. Philadelphia and New York: Lea Brothers & Co. 1900 [Price, $10.00 a year.]

This is one of the most welcome of the contributions to the periodical literature of medicine. It appears quarterly and with great promptitude, a remarkable fact when the great labor of preparing it is considered. The articles in this number are: diseases of the thorax and its viscera, including the heart, lungs and blood-vessels, by William Ewart; diseases of the skin, by Henry W. Stelwagon; diseases of the nervous system, by William G. Spiller; and obstetrics, by William C. Norris.

Dr. Ewart's article deals at considerable length with the diseases which it handles, and will be found particularly attractive to the general practitioner of medicine on account of the many valuable hints on treatment which are found therein. Dr. Stelwagon's article on diseases of the skin is one of the best digests on that subject we have seen and here, again, will be found great aid in treatment, in a most perplexing department of medicine to every one, excepting the trained dermatologist.

Dr. Spiller has presented many important points relating to neurology. Every general practitioner will be interested in what is here said under the head of functional diseases, where Dr. Spiller places those of the unknown pathology, such as epilepsy, hysteria, and the like. Much can be learned from this author about the treatment of these and the neuroses in general.

Perhaps the most attractive section is that on obstetrics, wherein Dr. Norris almost surprises us with the wealth of his contribution. The importance of duly considering the heart in pregnancy is well set forth in this article, and a liberal quotation is made from Dr. Adam H. Wright's recent valuable contribution to the literature of the subject, published in the *American Medical Quarterly*, September, 1899. Fronczak's article in the BUFFALO MEDICAL JOURNAL, January, 1900, on Labordé's method of resuscitating the apparently dead newborn, also receives extended notice. By and large, this is one of the best volumes of this useful series yet issued, and serves to demonstrate the great value of this method of presenting a digest of recent literature.

INJURIES TO THE EYE IN THEIR MEDICO-LEGAL ASPECT. By S. BAUDRY, M.D., Professor in the Faculty of Medicine, University of Lille, France, etc. Translated from the original by Alfred James Osterheimer, Jr, M. D., of Philadelphia, Pa. Revised and edited by Charles A Oliver, A. M., M. D., Attending Surgeon to the Wills Eye Hospital; Ophthalmic Surgeon to the Philadelphia Hospital; Member of the American and French Ophthalmological Societies, etc. With an adaptation of the Medico-legal Chapter to the Courts of the United States of America, by Charles Sinkler, Esq., Member of the Philadelphia Bar. Pages, x.—161. Philadelphia: The F. A. Davis Co., Publishers, 1914–16 Cherry street. 1900. [Price, $1.00.]

Great credit should be given those who undertook this work; while concise and brief it represents a tremendous amount of material boiled down for instantaneous reference. The index is very complete and the bibliography gives one an idea of the mass of literature utilised.

Ordinarily the laborious translation and editing of the best of foreign medical literature which enables us to keep in touch with the latest theories and practice abroad has not received anything like the encouragement it should. We trust this book will prove an exception to the rule. Some of the knotty points on expert testimony are well explained.

A DICTIONARY OF MEDICINE AND THE ALLIED SCIENCES. Comprising the Pronunciation, Derivation and Full Explanation of Medical, Pharmaceutical, Dental and Veterinary Terms; together with much collateral descriptive matter, numerous tables, etc. By ALEXANDER DUANE, M. D., Assistant Surgeon to the New York Ophthalmic and Aural Institute; Reviser of Medical terms for Webster's International Dictionary. New (3d) edition. In one 8vo volume of 656 pages, with eight full page colored plates. Philadelphia and New York: Lea Brothers & Co. 1900. [Price, $3; full flexible leather $4.00]

The vocabulary of medicine is ever changing, ever increasing, hence new dictionary editions at comparatively short intervals are imperative. This painstaking author has given great study to his work with a view to retain and add the useful and eliminate the obsolete. By studying both sides of this question carefully he has been able to keep his book within convenient limits as to size, while at the same time he has given us a most practical dictionary.

This edition contains much new material which keeps it abreast of the advances in the several departments of medical science. Besides this the work has undergone careful revision so that it may well be said to represent the immediate present. It is one of the most practical of the smaller dictionaries; its letter is plain, its definitions are clear, and its arrangement excellent. We could wish that diphthongs had been omitted more generally, since, in almost every other respect the author has modernised his work. We repeat, however, that it is one of the best dictionaries of its class extant.

ESSENTIALS OF MEDICAL AND CLINICAL CHEMISTRY. With Laboratory Exercises. By SAMUEL E. WOODY, A M., M. D. Fourth edition, revised and enlarged. Illustrated. Philadelphia: P. Blakiston's Son & Co. 1900. [Price, $1.50.]

This little volume is a model of excellence. Nothing essential to a proper knowledge of medical chemistry is omitted, yet on the other hand the student is spared the burdensome details of that science which, in the words of Dr. Holmes, is so liable to spoil on one's hands. The fourth edition has been revised and largely rewritten.

M.J.F.

FOOD FOR THE SICK AND HOW TO PREPARE IT. With a Chapter on Food for the Baby. By EDWIN CHARLES FRENCH, M. D. Louisville: John P. Morton & Co. 1900. [Price, $1.00.]

This book is one which both general practitioner and nurse will find valuable. It contains very complete diet lists for use in general medicine, nervous diseases, and after surgical operations. A large number of excellent recipes are also included, together with a chapter on infant feeding. The mechanical part of the book reflects credit on the publishers.

M.J.F.

A MANUAL OF OBSTETRICS. By F. A. KING, M. D., Professor of Obstetrics and Diseases of Women in the Medical Department of the Columbian University, Washington, D. C., and in the University of Vermont, etc. New (8th) edition. In one 12mo volume of 612 pages, with 264 illustrations. Philadelphia and New York: Lea Brothers & Co., Publishers. 1900. [Price, $2.50 net.]

This excellent manual has so well withstood the test of time, that it needs no extravagant praise to bring it to the attention of those for whom it is intended,—practitioners, instructors and students. While it is elementary in character, it is yet helpful to the three classes named. Professor King is a teacher of great experience as well as an obstetrician of unquestioned skill. These two characteristics serve to make him well qualified to prepare such a manual. In the several editions that have been issued from time to time as they have been demanded he has kept the art he has taught well up to its advances.

This is one of the branches of medical science in which a manual is needful, though, of course, it is not expected to take the place of the systematic treatise. In this edition some changes have been made, a few errors corrected, and forty or more new illustrations supplied. We commend it, if it were possible, even more heartily than ever. It is the obstetric manual, *par excellence.*

BOOKS RECEIVED.

A Manual of Otology. By Gorham Bacon, A. M., M. D., Professor of Otology in Cornell University Medical College, New York. With an introductory chapter by Clarence J. Blake, M. D., Professor of Otology in the Harvard Medical School, Boston. In one handsome 12mo. volume of 422 pages, with 114 engravings and three colored plates. Lea Brothers & Co., Publishers, Philadelphia and New York. 1900. Price, cloth, $2.25, net.

Dunglison's Dictionary of Medical Science. Containing a full explanation of the various subjects and terms of Anatomy, Physiology, Medical Chemistry, Pharmacy, Pharmacology, Therapeutics, Medicine, Hygiene, Dietetics, Pathology, Surgery, Ophthalmology, Otology, Laryngology, Dermatology, Gynecology, Obstetrics, Pediatrics, Medical Jurisprudence, Dentistry, Veterinary Science, etc., etc. By ROBLEY DUNGLISON, M. D, LL. D., late Professor of the Institutes of Medicine in the Jefferson Medical College of Philadelphia Edited by Richard J. Dunglison, A. M., M. D. New (22d) edition, thoroughly revised, greatly enlarged and improved, with the pronunciation, accentuation and derivation of the terms. In one magnificent imperial octavo volume of 1350 pages. Lea Brothers & Co., Publishers, Philadelphia and New York. 1900. Cloth, $7.00, net; full leather, $8.00 net.

Rhinology, Laryngology and Otology, and their Significance in General Medicine. By E. P. Friedrich, M. D., Privadocent at the University of Leipzig. Authorised translation from the German. Edited by H. Holbrook Curtis, M. D., Consulting Surgeon to the New York Nose and Throat Hospital and to the Diphtheria and Scarlet Fever Hospitals. Octavo, pp. 348. Philadelphia and London. W. B. Saunders & Co. 1900. Price $2.50 net.

Bacteriology and Surgical Technique for Nurses. By Emily M. A. Stoney, Superintendent of the Training School for Nurses, St. Anthony's Hospital, Rock Island, Ill., etc. Duodecimo, pp. 190. Illustrated. Philadelphia: W. B. Saunders & Co. 1900. Price, $1.25, net.

Medical and Surgical Nursing. A treatise on modern nursing from the physician's and surgeon's standpoint, for the guidance of graduate and student nurses, together with practical instruction in the art of cooking for the sick. Edited by H. J. O'Brien, M. D., Professor of Clinical Surgery, Hamline University; Surgeon to St. Joseph's Hospital, St. Paul, etc. 12mo. pp. ix.—287. New York: G. P. Putnam's Sons. 1900 [Price, $1.50.]

Deaver's Surgical Anatomy. A Treatise on Human Anatomy in its Application to the Practice of Medicine and Surgery. By John B. Deaver, M. D., Surgeon-in-Chief to the German Hospital, Philadelphia. In three royal 8vo volumes of more than 600 pages each, containing about 450 full-page plates, nearly all drawn for this work from original dissections. Volume I.—Upper extremity; back of neck, shoulder, and trunk; cranium; scalp; face. Volume II.—Neck; mouth, pharynx, larynx, nose; orbit; eyeball; organ of hearing; brain; female perineum; male perineum. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut street. 1900. Price, handsome cloth, $21.00; full sheep, $24.00; half green Morocco, marbled edges, $24.00; half Russia, gilt, marbled edges, $27.00 net.

A Reference Handbook of the Medical Sciences. Embracing the Entire Range of Scientific and Practical Medicine and Allied Science. By various writers. A new edition, completely revised and rewritten. Edited by Albert H. Buck, M D., New York City. Volume I.—AAC–BLA. Illustrated by numerous chromo-lithographs and 498 fine half-tone and wood engravings. Nine volumes, imperial 8vo. New York: William Wood & Co. 1900. Price, muslin, $6.00 per volume; leather, $7.00 per volume; half Morocco, $8.00 per volume.

A Treatise on Fractures and Dislocations. For Practitioners and Students. By Lewis A. Stimson, B A., M. D., Professor of Surgery in Cornell University Medical College, New York. New (3d) edition. In one 8vo volume of 842 pages, with 336 engravings and 32 full-page plates. Philadelphia and New York: Lea Brothers & Co. 1900. Price, cloth, $5.00 net; leather, $6.00 net.

A Text-Book of the Practice of Medicine. By James M. Anders, M. D., Ph D., LL. D., Professor of the Practice of Medicine and of Clinical Medicine in the Medico-Chirurgical College, Philadelphia; Attending Physician to the Medico-Chirurgical and Samaritan Hospitals, Philadelphia. Octavo, pp. 1263. Illustrated. Fourth edition, thoroughly revised. Philadelphia and London: W. B. Saunders & Co. 1900. Price, cloth, $5.00 net; sheep and half Morocco, $6.50.

Modern Surgery. General and Operative. By John Chalmers DaCosta, M. D., Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College, Philadelphia; Surgeon to the Philadelphia Hospital and to St. Joseph's Hospital, Philadelphia. Octavo, pp. 1117. With 493 illustrations. Third edition, revised and enlarged. Philadelphia and London: W. B. Saunders & Co. 1900. Price, cloth, $5.50 net; half Morocco, $6.00.

Modern Medicine. By Julius L. Salinger, M. D., Demonstrator of Clinical Medicine, Jefferson Medical College; Hematologist to the Jefferson Medical College Hospital; Pathologist to the Lying-in Charity Hospital, Philadelphia; Assistant Pathologist to the Philadelphia Hospital. Octavo, pp. 801. Illustrated. Philadelphia and London: W. B. Saunders & Co. 1900. Price, cloth, $4.00 net.

Twentieth Century Practice. An International Encyclopedia of Modern Medical Science. By Leading Authorities of Europe and America. Edited by Thomas L. Stedman, M. D., New York City. In twenty volumes. Volume XX. "Tuberculosis, Yellow Fever and Miscellaneous. General Index." New York: William Wood & Company. 1900.

Studies in the Psychology of Sex. The Evolution of Modesty.—The Phenomena of Sexual Periodicity.—Auto-Erotism. By Havelock Ellis. Pages xii.—275. Sold only to physicians and lawyers. Philadelphia: F. A. Davis Company. 1900. Cloth, $2.00 net.

A Text-Book of the Diseases of Women. By Henry J. Garrigues, A. M., M. D., Gynecologist to St Mark's Hospital, New York City. Octavo volume of 756 pages, with 367 illustrations. Third edition, thoroughly revised. Philadelphia and London: W. B. Saunders & Co. 1900. Price, cloth, $4.00 net; sheep or half Morocco, $5.50 net.

An American Text-Book of Physiology. By ten of the Leading Physiologists of America. Edited by William H. Howell, Ph. D., M. D., Professor of Physiology in the Johns Hopkins University, Baltimore. Octavo, 1052 pages, illustrated. Second edition, revised. Volume I. Philadelphia: W. B. Saunders & Co. 1900. Price, cloth, $6.00 net; sheep or half Morocco, $7.00 net.

Diet Lists and Sick-Room Dietary. By Jerome B. Thomas, M. D., Visiting Physician to the Home for Friendless Women and Children and to the Newsboys' Home; Assistant Bacteriologist, Brooklyn Health Department. Philadelphia: W. B. Saunders & Co. 1900. Price, cloth, $1.50.

Taylor on Genito-Urinary and Venereal Diseases and Syphilis. The Pathology and Treatment of Genito-Urinary and Venereal Diseases and Syphilis. By Robert W. Taylor, A. M , M. D., Clinical Professor of Venereal Diseases in the College of Physicians and Surgeons, New York. New (2d) edition. Octavo volume of 720 pages, with 135 engravings and 27 full-page plates in colors and monotone. Philadelphia and New York: Lea Brothers & Co. 1900. Cloth, $5.00 net; leather, $6.00

Heart Disease in Childhood and Youth. By Charles W. Chapman, M. D., Durh., M. R. C. P. Lond., Physician to the National Hospital for Diseases of the Heart, Soho Square, W , etc. With an introduction by Sir Samuel Wilks, Bart., M. D., F. R. S., Physician Extraordinary to H. M. the Queen, etc. Duodecimo, pp. 101. London: Medical Publishing Co. 1900. Price, 3s. 6.

Physical Diagnosis of Diseases of the Chest. By Richard C. Cabot, M. D., Physician to Out-patients, Massachusetts General Hospital; Assistant in Clinical Medicine, Harvard Medical School. Octavo, pp. xv.—310. 142 illustrations. New York: William Wood & Co. 1900.

Les Maladies Qu'on Soigne A. Berck. Abcès froids, adénites, ostéites, Tumeurs Blanches, Coxalgie, Mal de Pott, Scoliose, Luxation Congénitale de la Hanche, Pied Bot, etc. Par F. Calot, Chirurgien en chef de l'Hopital Rothschild, etc., etc. Pages, 433. Paris: G. Masson, Editeur, Librairie de L'Academie de Médecine, 120 Boulevard Saint Germain. 1900.

A Text-Book Upon the Pathogenic Bacteria. For Students of Medicine and Physicians. By Joseph McFarland, M. D., Professor of Pathology in the Medico-Chirurgical College, Philadelphia. Octavo, 621 pages, illustrated. Third edition, revised and enlarged. Philadelphia and London: W. B. Saunders & Co. 1900. Price, cloth, $3.25 net.

Pathology and Morbid Anatomy. By T. Henry Green, M. D., F. R. C. P., Physician and Special Lecturer on Clinical Medicine at Charing Cross Hospital, etc. New (9th) American from ninth English edition. Revised and enlarged by H. Montague Murray, M. D., F. R. C. P.. Lecturer on Pathology and Morbid Anatomy at Charing Cross Hospital. Revised for America by Walton Martin, Ph. B., M. D., of the College of Physicians and Surgeons, New York City. Octavo volume of 578 pages, with 4 colored plates and 339 engravings. Philadelphia and New York: Lea Brothers & Co. Price, cloth, $3.25 net

The American Illustrated Medical Dictionary. A New and Complete Dictionary of the Terms Used in Medicine, Surgery, Dentistry, Pharmacy, Chemistry and the Kindred Branches. With their Pronunciation, Derivation, and Definition. Including much Collateral Information of an Encyclopedic Character. By W. A. Newman Dorland, A. M., M. D., Assistant Obstetrician to the University of Pennsylvania Hospital; Editor of the American Pocket Medical Dictionary. With numerous illustrations and 24 colored plates. Philadelphia and London: W. B. Saunders & Co. 1900. Price, $4.50, plain; $5.00, index.

A Text-Book of Pathology. By Alfred Stengel, M. D., Professor of Clinical Medicine in the University of Pennsylvania; Physician to the Philadelphia Hospital; Physician to the Children's Hospital, Philadelphia, etc. Octavo, pp. 873. With 372 illustrations. Third edition, revised. Philadelphia and London: W. B. Saunders & Co. 1900. Price, cloth, $5.00 net; half-Morocco, $6.00 net.

Saunders's Question Compends. Essentials of Histology. By Louis Leroy, B. S., M. D., Professor of Histology and Pathology, in Vanderbilt University, Medical and Dental Departments; City Bacteriologist to Nashville, Tenn.; Bacteriologist to the State of Tennessee. Arranged with questions following each chapter. Duodecimo, pp. 231, 72 illustrations. Philadelphia: W. B. Saunders & Co. 1900. Price, $1.00 net.

Saunders's Pocket Medical Formulary. With an appendix. By William M. Powell, M. D , anthor of "Essentials of Diseases of Children." Sixth edition, thoroughly revised. Philadelphia: W. B. Saunders & Co. 1900. Price, $2.00, net.

A Pocket Text-Book of Diseases of the Eye, Ear, Nose and Throat, for students and practitioners. By William L. Ballinger, M. D., Assistant Professor of Otology, Rhinology and Laryngology in the College of Physicians and Surgeons, Chicago, etc., and A G. Wippern, M. D., Professor of Ophthalmology and Otology in the Chicago Eye, Ear, Nose and Throat College. In one handsome 12mo volume of 525 pages, with 150 engravings and 6 full-page colored plates. Philadelphia and New York: Lea Brothers & Co., Publishers. 1900. Price, cloth, $2.00, net; flexible red leather, $2.50, net.

LITERARY NOTES.

THE New Zealand *Medical Journal* is a new candidate for professional favor. The first number bears date August, 1900, and is an excellent specimen of British Colonial journalism, both as to material and mechanical construction. It is edited by Dr. J. Malcom Mason, and is published for the New Zealand branch of the British Medical Association. It is printed by John Mackey, government printer, at Wellington, N.Z.

A New Therapeutic Reference for Physicians and Students has been published recently by W. R. Warner & Co., of Philadelphia. It is a duodecimo volume of 224 pages and contains many excellent tables of value to both physicians and students, besides much therapeutic material that will more than repay its cost. It can be had upon payment of 25 cents, bound in cloth, or for 50 cents, in flexible leather. Address the publishers, W. R. Warner & Co., 639 North Broad Street, Philadelphia, Pa.

MESSRS. BATTLE & Co., of St. Louis, are sending out a series of twelve pamphlets, each to contain an anatomical drawing in colors, illustrating fractures of the long bones. The drawing for September was a fracture of the femur below the trochanters, with muscles colored in red. It is artistic as well as anatomically correct. The series will be sent to any physician who will apply to Messrs. Battle & Co., 2001 Locust St., Louis, Mo.

THE New York Post-Graduate Medical School and Hospital has issued its 19th Annual Announcement. The largest number of physicians in the history of the school attended last year—namely, 609. They came from 43 different states, territories and countries. This is easily the most famous post-graduate medical school in America.

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Original Communications.

AUTOINFECTION AS A FACTOR IN DISEASES OF INFANTS AND CHILDREN.[1]

BY J. ROBERTS JOHNSON, M. D., Syracuse, N. Y.

THAT which we call the "germ theory" of disease was broadly hinted at many years before the dawn of the Christian era. Nearly two thousand years ago a certain philosopher said: "It is also to be noticed if there be any marshy places that certain minute animals breed there which are invisible to the eye, and yet getting into the system through mouth and nostrils cause serious disorders." Does it not seem remarkable that an idea which should become a fundamental principle of pathology and mark a new era in scientific medicine should be taught centuries ago?

Many of the conclusions of the early investigators have proven false, and it was not until the microscope revealed the hitherto unseen that much of definite knowledge has been reached and practical results demonstrated. Many of the etiological factors of disease were until now matters of theoretical speculation, and upon this ground therapy was based.

The microscope has disclosed in not a few instances the cause of disease and therapeutically we deal with definite and known organisms. The study of the specific bacteria as an origin of disease has opened up a new an ever increasing field of scientific research, and one which in the last two decades has done as much for rational medicine as all else combined. With each new finding in pathology, naturally comes the question does it aid in curing disease? Heretofore the bacteriologist has been compelled to admit that the demonstration of the specific cause in not a few infectious diseases which has been obtained through his efforts, has not resulted in the discovery of the specific treatment of these diseases. This, in relation to some morbid conditions at least, can no longer be said.

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[1] Read at the thirty-third annual meeting of the Medical Association of Central New York, held at Rochester, N. Y., October 16, 1900.

Self-infection is the infection of an organism by a ferment or poison generated within itself. The clinical picture developed depends upon the nature and virulence of the poison, the susceptibility of the patient, and the inherent power of the subject in combating disease. Starr, in relation to convulsions, says:

> An infant is a bundle of nerves and nerve centers, and reflexes, in a state of great activity, prepared to receive, store up, and reënergise a world full of new impressions suddenly thrust upon it. While the nervous system of the adult has acquired the steadiness of long habit and has but to repair waste, that of the infant has all of the delicacy and instability of newly formed and highly impressionable protoplasm and besides having to preside over the processes of repair, it must govern the growth of the whole organism.

What is said of convulsive seizures is equally true of the causes of autoinfection in infants and children, which differs from that of the adult by its more frequent occurrence, rapidity of onset and more profound degree of expression. Cell life in the infant is very active and its assimilative powers are equally energetic; any change in the metabolic processes soon produce a morbid state. The infant may be infected by poisonous germs and toxic substances, which are only recognised when some change of the normal functions takes place and more or less rapidly disease phenomena appears.

The important rôle of autoinfection in diseases of infants and children is becoming better understood, and explains the increased dangers of mixed infections which it adds to that of the diseases which are purely infectious, contagious, or both, and which of course, come from exposure to conditions wholly foreign to the organism.

That bacteria infest the system continuously is well recognised and that, in a normal condition we are, in a measure, immune to their effects. The infant by reason of its rapid cell proliferation, its natural and often unnatural diet, its surroundings, and greater susceptibility to autoinfection succumbs to disease much more readily than does the adult. Childhood is immune to few diseases of bacterial origin.

In the elaboration of bacteria in the system, a toxin is developed which produces a series of clinical circumstances, leading to dangerous or even fatal results. The early recognition of this truth is important if the poison is to be annulled.

With our present knowledge, it is impossible to state whether certain morbid conditions are due in their entirety to defective metabolism or the result of bacterial toxins or both combined. That there is no sharp distinction between the pathogenic and nonpathogenic bacteria is recognised. Under certain conditions, the virulence of disease bacteria, is annulled, while the most innocent may become virulent.

Views as to the toxicity of certain secretions within the animal economy are in an unsettled condition. The trend of medical thought, however, is to regard them as germicidal in character, so that each is ready to guard the entrance of poisonous material into the system, or if admitted to destroy its pernicious effects.

When we consider the enormous mortality-rate in infants, and to what an extent autoinfection is an etiological factor in producing such appalling records, it stands us well in hand to early recognise such infection, that not alone the therapeutic measures of long recognised value may be used, but also call to our aid the latest and best which organo- and serum therapy offers.

The sources of autoinfection begin to operate in the early period of fetal life through the placental circulation, and may remain latent or develop into the complete cycle of disease factors and even death "in utero." Deep inspirations of the infant during the last stage of labor may carry infected material into the bronchial tubes, producing a broncho-pneumonia, which soon proves fatal.

In the early days of infantile life, pyogenic germs may enter the system, the most frequent avenue being the umbilical wound. The clinical picture varies according to the character and location of the inflammation. The severity of the symptoms depends somewhat on the nature of the bacteria, which excites the disease and of their virulence at the time of their infection.

A meningitis, a pneumonia, joint suppuration or an erysipelas may ensue according to the area involved. Since antisepsis has receivd its due recognition, these diseases are fortunately less often seen.

The gastro-intestinal route normally is tenanted by germs virulent and benign. In health, the infant suffers no harm from their presence, but if the natural resistance is lowered, either because food of improper quality or quantity is allowed, then bacterial fermentation takes place and discomfort and suffering attend. Poisonous products are rapidly formed within the system affecting not alone the gastro-intestinal route, but the entire economy.

Not infrequently the nervous centers are profoundly influenced and convulsions or meningeal complications follow: some of the symptoms in these severe cases point to a septic condition and to aid nature in its eliminative efforts is clearly indicated.

Pure milk, which is conceded to be the "staff of life" for the infant in health, may become under certain circumstances pabulum for the proliferation of various disease producing organisms in the intestinal route, and, by rapid growth, soon present the clinical picture of that prevalent and dangerous malady which modern writers have properly named acute milk infection. By the withdrawal of milk from the infant during the early stage of the disease supplemented by other remedial measures indicated, far better results are now obtained than was considered possible a few years ago.

The infective bacteria chiefly inhabit the lower intestinal tract. By means of lavage, purgatives, and colonic irrigations much of the products upon which bacteria thrive and multiply is gotten rid of, and hordes of deadly organisms removed. Such a procedure is rational and easy of application. Much has been learned not alone from the grosser examination of the infant stools, but by the microscopic as well.

All infant stools contain bacteria, but the prognostic value is very great, if we know that the streptococci are absent. The treatment is less difficult in the simple coli varieties. Such a distinction is quite imperative today, if the infective nature of the disease is considered, not alone as to the child already sick, but that others of the same family or institution may not be infected. In this country nearly one half of all deaths below one year are caused by gastro-intestinal diseases. Outside of this class the entire infectious group cannot claim an equal mortality. It is well established that children of this class do badly if huddled together; mild cases become severe, and previously healthy children are made sick. The same vigilance is necessary as in other infectious diseases. Isolation and perfect cleanliness should be observed. Prophylaxis is of paramount value. If the child is artificially fed, let the food be as clean, correctly prepared, and given as our latest knowledge directs. The milk supply is of chief value, not alone as to its bacterial condition, but as to grosser impurities. If autoinfection is to be prevented, it must largely be by the giving of food free from autotoxic substances and bacterial toxins.

Post mortem examination reveals that in a proportion of cases microbes are found in the intestinal mucosa, principally in the lower portion, the duodenum and jejunum being quite free. In the mild gastro-enteritis of babies, the lesions are chiefly due to the action of chemical substances taken in with the food, or elaborated within the digestive tube. The lesions so produced, serve as points of entrance for bacteria, and these in turn cause further morbid changes or even septicemia. If the problem of keeping the digestive route constantly in a normal condition were solved, some of the reflex phenomena whose etiology is not entirely clear would fail to appear.

The mouth and naso-pharynx are fertile fields for autoinfection, because in these cavities various bacteria are omnipresent, and any abrasion of the lining membranes, or a lowering of their tone and resisting power may favor their entrance, proliferation and consequent self-infection. In this connection, I wish to quote from a recent article by Dr. Francis Huber:

> A normal mucous membrane is the best safeguard against the onset of a number of infectious microörganisms. The invasion of diphtheria, tuberculosis, and now and then meningitis is favored by an abnormal condition of the nasal and pharyngeal mucous membrane. The best preventive therefore is to keep the mucous membrane in a healthy state. The eloquent appeals in favor of a daily naso-pharyngeal toilet have added somewhat in popularising this method. Anatomists have clearly demonstrated the direct lymphatic communication between the vessels in the naso-pharyngeal mucous membrane and those at the base of the brain. Bacteriologists have reported the presence of microörganisms in the nose and throat similar to those found in many cases of meningitis. Clinical observations show that the different varieties of meningitis are most commonly observed between the ages of three and five years, at a time when naso-pharyngeal disturbances are very common. The intimate lymphatic connection referred to, and the identity of the microorganisms in the naso-pharynx and those found in a large number of cases of meningitis tend to explain the etiology of many heretofore obscure inflammations of the brain and meninges.

The absorptive power of the naso-pharyngeal membrane is marked. Microörganisms rapidly multiply in these unhealthy secretions and tissues, and if undisturbed may be taken by the blood current to be a nidus of disease in some other part of the body. The nasopharynx of every child suffering from infectious disease should daily be douched with the physiological salt solution or some mild alkaline antiseptic mixture. As a prophylactic measure, this should be done in all children exposed to diphtheria or scarlet fever, and the like.

Lymphoid tissue in the young is prone to take on morbid change. It readily appropriates pathogenic germs and will give up its own entity by calcific degeneration or suppuration rather than inoculate the system. Tuberculous adentitis is but the manifestation of infection received directly from the pharynx, or from hypertrophied tonsils and adenoid vegetations, these latter strongly favor tuberculosis and should early receive surgical treatment. The lymph nodes of the neck and thorax are frequently the earliest seat of tuberculous deposits and in many cases they are foci from which, secondary infection of the lungs, brain and joints may occur.

Some of the meningeal inflammations in children, in which the etiology is obscure, are doubtless of infective origin. Lumbar puncture as a diagnostic measure often reveals the streptococci and pneumococci in the simple cerebral or cerebro-spinal types, while the tubercle bacilli is most frequently found in the tubercular variety.

From post mortem findings in the wall of the intestines, some cases of tubercular meningitis are now considered to be a secondary infection. Autopsy does not always reveal in these tubercular cases sufficient morbid change to cause death. Is it not possible that other infection, more deadly, is a complicating factor?

That the pneumococcus is an etiological factor in the pneumonias of children is generally admitted. In some of these cases the local expression is not at all proportionate to the violence of the general symptoms at least in the early stages. In such conditions there is probably a mixed infection in which the streptococci played a deadly part. This organism is much more destructive than is the pneumococci, or even the tubercle bacilli. In these severe cases, especially of a mixed type, recent clinical reports favor the use of antistreptococcic serum, as an agent of value; other medication is not to be ignored. A broncho-pneumonia accompanying pertussis, which so often proves fatal, or that which attends the latter stages of scarlet fever or diphtheria is usually a secondary streptococcic infection.

A toxic condition of the system arising from delayed elimination of fecal matter, which may be reabsorbed by the intestine, is an important etiological factor in the functional neuroses of children; chorea, tetany, night terrors and dreaming, nocturnal enuresis, migraine and allied conditions and epilepsy belonging to this class. These diseases mostly occur at a time when overeating or eating of food unsuitable to the child's individual capacity is indulged in with resultant putrefaction or delayed elimination. On this premise the treatment of these diseases is largely dietetic. If indican in considerable quantity is found in the urine, it is a positive chemical test that autointoxication from the intestinal canal is in progress.

Constipated and dyspeptic children are apt to suffer from erythema, resulting from intestinal autoinfection, sometimes to such an extent that the diagnosis between it and scarlatina for a time is doubtful.

In the congenital absence of the thyroid gland, or of its perverted function when present, a picture of an acute or chronic poisoning is presented. This gland has an antitoxic function and thereby prevents infection of the organism by destroying or changing certain products of metabolism which would otherwise prove poisonous. Heretofore all attempts or remedial measures for the relief of this condition have failed because the class of remedies used empirically did not fulfil the indications as now understood. The brilliant success already achieved with thyroid medication in combating this autoinfection is a distinct advance in applied therapeutics.

Uric acid, sugar and other unresolved products of the economy whose elimination is mainly carried on through the kidneys, so irritate their epithelial lining that inflammation and abrasion of the surface facilitate the entrance and activity of toxin-producing bacteria and their consequent absorption in the system, disturbs the nerve centers and causes much of the ill-defined malaise, and listlessness which are oftentimes attributed to idiosyncracies of temperament only. The examination of the urine chemical and microscopical gives data of much value. How frequently the source of severe headaches, migrating neuralgia, or of persistent vomiting may be reached by the examination of the urine in the form of uric acid and its attending power for autoinfection.

While admitting that positive conclusions regarding the causation of some diseased conditions is not conclusively settled, yet scientific investigation is rapidly unfolding the mystery of obscure etiology and placing therapeutics on a more rational basis.

In a word, prophylaxis is the means by which the impressionable infant organism is saved from the varied phenomena of autoinfection.

UNEQUAL WIDTH OF THE PUPILS OF THE INSANE.—Able (*Ungar. med. Presse*) investigated 326 patients with regard to the pupillary state. In sixty cases of progressive paralysis pupillary inequality (anisocoria) was present in 52 per cent.; in insanity of the congenital type, 27 per cent.; in epileptics, 26 per cent.; and in senile dementia, 25 per cent. As anisocoria is always a pathological phenomenon, these figures are significant.

THREE VARIETIES OF MEMBRANOUS ANGINAS PRODUCED BY MICROÖRGANISMS OTHER THAN THE KLEBS-LÖFFLER BACILLUS AND THEIR SANITARY SIGNIFICANCE.

By WILLIAM G. BISSELL, M. D.,
Bacteriologist, Department of Health, Buffalo, N. Y.

THAT the diphtheria bacillus is not the only microörganism capable of producing a pseudo-membranous inflammation, is a well established fact. Prior to the inauguration of the more exact microscopic methods for the determination of a diphtheritic infection, there were several varieties of pseudo-membanous inflammation of the tonsils classes as "diphtheria" which, by recent research, have been conclusively demonstrated to be produced by microörganisms other than the Klebs-Löffler bacillus. The appearance of the membranes in these conditions is not dissimilar to that produced by the Klebs-Löffler bacillus, and the constitutional disturbance may be such as not to be capable of differentiation from that usually attending a severe case of diphtheria.

The microörganisms in question are the streptococcus pyogenes, micrococcus of sputum septicemia, which belongs to the bacteria, and oidium albicans, a member of the fungi group. A Klebs-Löffler infection has been shown to be capable of wide variances in its clinical manifestations, and these organisms can, likewise, produce illness having a clinical picture varying from the most mild sore throat to a fatal disease.

In the experience of the Bureau of Bacteriology in this city, the oidium albicans has never produced a membranous condition of the tonsils that has resulted fatally; but instances of streptococcus and sputum septicemic infections have frequently occurred, followed in several instances by death of the patient. These conditions cannot be classed with the contagious diseases in the true sense of the term, for though they are capable of transmission by direct inoculation, they do not appear to be communicable.

In the early part of March, 1896, the first investigation was carried on relative to a membranous condition of the tonsil, producing a severe clinical disturbance which resulted fatally. Dr. J. H. Potter, of Buffalo, submitted a culture, and examination revealed the presence of short-chained streptococci and staphylococci. Considering the illness to be diphtheria, he submitted a second culture, examination of which resulted as in the former instance. A small piece of membrane was found on the swab accompanying the second culture outfit, and examination revealed the presence of streptococci almost to the exclusion of any other organism. A diagnosis of a streptococcus tonsilar infection was made. On the seventh day of the disease, the patient, a child, died, the result of a general toxemia. Diphtheritic antitoxin had been administered on two different occasions without the slightest beneficial effect.

This being the first reported instance in Buffalo of death resulting from a streptococcus tonsilar infection, the facts in the case were submitted to Dr. Herman Biggs, director of the New York bacteriological health laboratories, requesting information as to whether similar instances had occurred in New York. Dr. Biggs replied that they had had several deaths from streptococcus toxemias, the tonsils being the seat of the primary invasion.

The following statement of Dr. Thomas Bagley, Buffalo, N. Y., contains an interesting account of a severe streptococcus tonsilar infection:

February 11, 1900, I was called to attend a boy 10 years of age. His parents stated that he had not been feeling well for about a day, complaining particularly of a sore throat. On examination, I found both tonsils enlarged, the right having the ordinary appearance of a follicular tonsilitis, the left presenting in its central portion a very suspicious membranous patch. The temperature at this time, was 104° F., pulse, 160, patient somewhat delirious and extremely nervous. On the second day, the general condition was worse, the temperature being 105° F; pulse, 170.

The right tonsil still retained the appearance of a follicular tonsilitis, but the left tonsil was completely covered with a dark grayish membrane resembling that usually seen in a severe case of tonsilar diphtheria. Becoming alarmed at the condition, 2,000 units of diphtheritic antitoxin serum were injected, and a culture sent to the Department of Health for confirmation of diagnosis. On the following day a report was received that the culture did not reveal anything typical of diphtheria, but requested that a second culture be submitted. In the meantime, the membranous patch had extended to the pharynx, into the posterior nasal passages, entirely covered the soft palate, and seemed inclined to extend forward. The right tonsil was completely covered with a membrane

The case, clinically, resembled diphtheria. A second culture was submitted, and, at this time, I was successful in obtaining a portion of the membrane which was, likewise, delivered to the bacteriological laboratory. The patient's condition was rapidly becoming more serious. The following morning, a report was received that there were no diphtheria bacilli in the culture. Examination of the membrane revealed streptococci to be present almost to the exclusion of other organisms.

On the fifth day of the disease, the temperature ranged from 103½° to 105° F; pulse, 120 to 170. There was no change in the appearance of the throat. Local treatment had included the use of strong solutions of the subsulphate of iron, a mixture of carbolic acid and glycerine, several applications of Löffler's solution, and continual use of peroxide of hydrogen. As the patient's condition was such that death seemed inevitable, and owing to the fact that streptococci predominated in the membrane, on the eighth day of the disease, as a last resort, 10 c.c. of antistreptococcus serum was employed. To my surprise, the boy's condition began to improve. The membrane commenced to exfoliate, and three days following, the uvula and left tonsil were entirely cleared of membrane. In a few days, the throat assumed a healthy appearance. The patient has made a good recovery.

An instance occurred, April 16, 1897, in the experience of the Health Department's laboratory, where the micrococcus of sputum septicemia was concerned in the production of a tonsilitis. Dr. Carlton R. Jewett submitted a culture from the throat of Miss B. The patient was extremely ill with a condition, considered to be tonsilar diphtheria. Examination of the culture did not reveal the presence of the Klebs-Löffler bacillus. Reluctant to believe the condition to be other than diphtheria, Dr. Jewett requested that the bacteriologist in person visit the case.

On the following day, Dr. Bissell, under the direction of Dr. Jewett, made several cultural inoculations and also succeeded in obtaining a small portion of the membranous exudate, which, at this time, covered the greater portion of both tonsils and portions of the uvula and naso-pharynx. Examination of the cultures resulted as in the former instance. Examination of the membrane revealed the micrococcus of sputum septicemia in abundance.

The patient died about the tenth day of the disease. Drs. C. G. Stockton, H. R. Hopkins and Roswell Park had been called in consultation and were unanimous in the statement that as regards the macroscopic appearances of the tonsils and the clinical symptoms, the illness could not be distinguished from a severe case of diphtheria. Diphtheritic antitoxin of a reliable make had been administered at the onset of the disease without the slightest improvement. There is no question but that this patient died the result of a toxemia, due to the micrococcus of sputum septicemia, the primary lesions being confined to the tonsils, uvula and naso-pharynx.

As regards the oidium albicans, many instances have occurred in the experience of the laboratory where the physician has recorded the diagnosis on the culture examination blank as diphtheria and the culture revealed an abundance of the "thrush" fungus. The membrane, in these conditions, has been noted as being present on the tonsils, the sides of the cheeks, the uvula, and, in one instance, a cast of the upper portion of the esophagus was submitted for inspection.

The following conclusions can be drawn from the above reported cases:

1. The streptococcus pyogenes and the micrococcus of sputum septicemia can produce membranous anginas, accompanied by physical disturbances sufficient to result in death.

2. The oidium albicans produces pseudo-membranous exudates easily mistaken for a Klebs-Löffler inflammation.

3. The only positive means of determining a Klebs-Löffler infection is by microscopic methods.

4. From the sanitary standpoint, as regards quarantine, anginas due to the streptococcus pyogenes, micrococcus of sputum septicemia and the oidium albicans, require little consideration.

143 ELMWOOD AVENUE.

THE LONGEVITY OF THE GONOCOCCUS.[1]

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THE title of this paper of itself precludes any very ambitious effort and its only purpose is to increase, to some extent, the mass of evidence which is constantly accumulating, concerning the virulence and the tenacity of life of the gonorrheic virus. It must be admitted by all that, while these facts are perhaps well enough known, theoretically, by the general practitioner, they are far from being thoroughly realised and acted upon.

Recent German authorities compute that gonorrhea is, next to measles, the most prevalent contagious disease, about three quarters of the adult male population and, according to different observers, from one-sixth to one half of adult females having contracted it. The proportion is probably higher in Germany than here, since coitus is there regarded as the natural means of voiding a secretion—a purely physiological function, like defecation and urination. They are ignorant of or disbelievers in there being any morality or immorality about the act, before marriage, so far as the male sex is concerned. This attitude, of course, tends to the increase or rather universality of prostitution, aided by the fancied, but illusory protection afforded by the regular medical examination of prostitutes.

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[1] Read at the thirty-third annual meeting of the Medical Association of Central New York, held at Rochester, N. Y., October 16, 1900.

The provident German father seeks only to avoid incoherence and excess in the exercise of the function, by warning his son against too early and too frequent indulgence and tries to avoid the danger of infection by securing for him a good-principled and constant mistress.

On the other hand, the American and English standpoint, that fornication is immoral, shames very many into concealing their venereal ailments, and so the proportion of such sufferers is much underestimated.

As regards the virulence of the gonococcus and the variety of lesions caused by it, new facts are being constantly demonstrated. Deaths ascribed thereto are more and more frequent, and staining and culture experiments have confirmed its presence in suppurating buboes, in the epididymis, in palmar abscess, in the ovaries, tubes and peritoneal cavity, the pleura, the endocardium and the arterial blood, the brain, meninges and spinal cord, the muscles, joints and tendon-sheaths, and the like.

Strangely enough, though the diagnosis of gonorrheal nephritis is frequently made, there have been only three authenticated cases of the gonococcus being found in the kidney. There is no doubt about its causing nephritis, but it is generally through the medium of other bacteria. The bladder also, like the adult vagina, is, as a rule, immune to the gonococcus, which does not thrive on squamous epithelium. In regard to the longevity of the gonococcus authorities differ. White and Martin's text-book on genito-urinary diseases, one of the best works yet published, says:

> 'Young married women become infected because long standing gleet is not generally regarded as a possible bar to matrimony; hence men with chronic urethral discharge should at least understand that the gonococcus may persist and maintain its virulence for two or three years.

I have been able to find no authority which mentions the persistence of the gonococcus, in the probable absence of reinfection, for more than four or five years, and many believe that these cases are caused by a disregarded or unacknowledged new infection. Finger mentions finding the gonococcus in two cases, four and four and a half years after infection, but they had both practised coitus repeatedly during the time.

The case I am about to relate covers twice this length of time and may be regarded as open to the same doubts, but the patient is an intimate acquaintance of mine and I feel certain would not lie to me, beside having no motive in so doing:

X. Y., 34 years old, heredity and general health good. Married nine years and has one healthy child. First gonorrhea in 1883; lasted two or three months; second gonorrhea, fall of 1885. Had anterior and posterior urethritis, epididymitis and cystitis, all of extreme severity. The strangury was so excessive that he was obliged to "camp out" on a water closet for forty-eight hours and empty his bladder drop by drop. The acute symptoms lasted ten or twelve weeks. Then had gleet for two years with exacerbations following drinking, railway journeys, etc. In 1887 had apparently another acute attack following coitus. Since 1887 has been free from discharge, but clap shreds have always been present in urine.

Married in 1891. Had not practised intercourse for over a year before marriage and has had no extra-marital relations, so that the last exposure dates from at least ten or eleven years ago. His wife has never been infected; has had leucorrhea but once, and that during the presence of an enormous abdominal tumor, which would naturally press upon and congest all the pelvic organs. When this tumor was removed, both the ovaries and the tubes were carefully examined and found to be perfectly healthy. She has never had pain on urination, bladder, tubal or ovarian symptoms.

The evening of August 20, 1900, he drank several cocktails and three or four glasses of beer. The same night practised coitus and, owing to the alcohol, it was extremely protracted. Here then is the explanation of the auto-reinfection and subsequent symptoms, the stimulus of alcohol, especially in the form of beer upon the genito-urinary tract, followed by the unaccustomed duration of the congestion and irritation of the parts. Small wonder that the latent prostatic gonorrhea reasserted itself, and that the next morning there was some urethral irritation and a very slight discharge. The succeeding morning, August 22d, he came to my office. The meatus was somewhat reddened, and there was a very slight muco-purulent discharge. On staining found very many pus and a few epithelial cells, many pus cells containing unmistakable gonococci. Urine, first portion, clear, with clap shreds; second portion, clear. Prescribed injection of ½ per cent. protargol solution.

August 26th, he said the discharge had soon stopped, but by milking the urethra, I obtained a muco-purulent discharge, containing pus and gonococci. On rectal examination, I found prostate to be over two inches in diameter, round, not very tender, and exactly resembling the hypertrophied prostate of old age, even in firmness of texture, though under massage it became softer; no fluctuation. The secretion expressed contained much pus, a few of the pus cells enclosing gonococci. Patient's condition was unchanged till September 1st (there was at no time pain in the urethra, even on urination, nor in the prostate) when he developed headache, general malaise and fever. I first saw him September 3d, owing to his absence from town, when I found him with flushed face, full pulse and temperature 102⅗°. There was a muco-purulent discharge, containing pus and gonococci. He then urinated, urine being very cloudy, and the effort of expelling the last drops brought a new gush of pus, with gonococci. This evidently came from the prostate, the urethra having been just washed out by the passage of urine. The fever ran intermittently till September 7th, when I again milked the prostate. The next day he resumed work. On September 13th massage of prostate, anterior injection of 1 per cent. protargol solution and instillation behind sphincter of ¾ per cent. solution. After this he complained of pain and irritation.

September 15th he developed left epididymitis, evidently subacute, as the pain was trifling and fever low, 101°. First and second glasses of urine cloudy. September 17th, epididymis little painful, except on pressure; forms a round mass, two-thirds the size of testicle and freely movable upon it, as if connected by a pedicle. Temperature, 102⅕°; abundant urethral discharge, somewhat bloody. It is almost unnecessary to mention that in acute gonorrheal epididymitis, the urethral discharge suddenly stops, to recommence when the attack is over. September 19 and 20th, no pain or fever; epididymis very little tender to pressure. Muco-purulent discharge containing pus and gonococci. Prostatic secretion shows a lot of pus and epithelial cells and a few diplococci. September 28th, slight discharge, containing pus, epithelium and mucus; no bacteria. First glass of urine clear with filaments; second glass, clear; prostate considerably smaller, secretion less purulent, no bacteria.

October 2d, considerable inspissated discharge at meatus, looking as if squeezed up from prostate. This patient has been able to expel material from the prostate by voluntary muscular effort, during the whole attack. Also at the end of urination and defecation prostatic secretion very often appears at the meatus. First portion of urine cloudy with filaments; second, slightly cloudy. Prostate rather larger and distinctly boggy in one portion, from which I expressed considerable secretion, which was much less purulent; no bacteria. October 10th, both urethral and prostatic secretions still contain a few gonococci.

This patient is now doing his regular work and feeling well, but it will take some time to clear up the long standing prostatic inflammation.

November 12th. There is no longer any discharge, the urine is clear, though with filaments, and the prostate greatly reduced in size. No bacteria have been found in its secretion or in the urinary filaments since October 2d.

It may be claimed that the massage of the prostate caused both the first febrile attack and the subsequent epididymitis. This is quite possible, but at present no other efficacious means of treating chronic prostatic inflammation is known, and it was certainly better to risk local infection by the expressed secretion than to leave this constant focus of poison intact.

This case is of particular interest on account of the persistence of the gonococcus for more than ten years, in the absence of all suspicious coitus. The finding of gonococci in a case of gleet, ten years after the primary gonorrhea, in a man repeatedly exposed to reinfection, proves absolutely nothing as to their being lineal descendants from the first inhabitants. It is far more likely that there have been several fresh colonisations by the germs. But since such chronicity, with absence of all noticeable symptoms, is possible, and since the ravages of this disease, commonly regarded as so insignificant, are so widespread and terrible, affecting not only the guilty but the innocent, it certainly seems high time that its gravity should be recognised, its diagnosis accurately made, its treatment carefully performed and its cure scientifically assured by the use of several tests. It is impossible to fulfil these indications without the constant use of the microscope, and I will close by quoting from a former paper of mine, on a similar subject:

> There is not the slightest doubt that it would be exactly as just to our patients to treat any febrile disease without the clinical thermometer, as to treat gonorrhea without the frequent, almost daily use of the microscope.

294 ALEXANDER STREET.

BLOOD EXAMINATIONS.[1]

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THE importance of the study of the blood can hardly be overestimated, when we consider that at one time or other, it carries all that is required as nutriment for all tissues of the body, as well as all the end products of constructive and destructive cell metabolism. Nothing in the whole range of biology offers such a promise of reward to the student nor confronts him with such an array of difficulties to overcome. There is no other field in the science of biology in which more careful and earnest work is being done. Out of all the mass of work of the past years the clinician has, however, gathered but little that he feels may not be contradicted tomorrow or that he can verify and put to every day use. This is what the general practitioner persuades himself to believe, and coupled with the difficulties of technique, has made him so out of patience with blood examinations, that he fails to avail himself of the help it can give him. It seems to me that he will take an entirely different view of the matter if he acquaints himself with the sources of error and the shortcomings of instruments, so doing he can get results and interpret them better, and will soon come to consider a blood examination as important as an urinalysis. If I can give ever so little help in that direction the purpose of this paper is attained.

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[1] Read before the section on pathology, Buffalo Academy of Medicine, September 18, 1900.

Large expectations were entertained as to the clinical value of counts and microscopical examination of the cellular elements, but they failed to throw much light on conditions considered most promising, while some valuable help has been obtained where least expected. No one would have suspected that it would be of any help, *e.g*,, in the diagnosis of central pneumonia, deep-seated suppuration and trichinosis, or in the prognosis of relapsing fever, or of pneumonia. Yet with the confusion still existing in the results of trustworthy observers in color analysis of the white corpuscle, it offers a ready-made absolute diagnosis only in some five or six diseases. In the rest it is only a valuable part of the symptom complex presented by a disease, and ranks no higher in value in making a diagnosis than any other typical symptom. On the other hand, it is safe to insist that there are few diseased conditions, certainly none associated with fever, on which the examination of the blood may not throw some light.

The conditions in which a blood count and hemaglobin estimation are by all odds of greatest immediate and certain use in saving life are just the ones in which they are least employed. This is in emergency work in surgery. Any one who is moderately expert in the technique can obtain definite information within ten or fifteen minutes and without a microscope, information that will not only do away with the embarrassing doubt as to whether an operation caused death, or the condition for which operation was risked, but will save life.

Such cases are, *e.g.*,, the common ones in accident hospitals, in which it seems impossible to determine whether the extreme condition of the patient is due to shock, concussion or compression, or whether it is due to hemorrhage. In the one case transfusion will save, and operation will kill, in the other the reverse results will obtain.

Internal concealed hemorrhages, such as may occur in tubal rupture, in extrauterine pregnancy, can be made out with certainty, easily excluding peritonitis, appendicitis, obstruction or strangulated hernia. Any other concealed bleeding from organs can be detected as well and the location made out with the aid of the physical signs.

A very safe rule to follow is never to operate when hemaglobin is as low as 30 per cent. A comparatively short time is required to regenerate the blood, if phthisis, malignant disease, typhoid, etc., are not complicating the case. Other things being equal, less than 1 per cent. of the blood mass is made up in two to five days, from 1 to 3 per cent. in five to fourteen days and from 3 to 4 per cent., which would mean very severe hemorrhage, is made up in from two weeks to one month.

The life of the red cells is very brief, even under normal conditions. There is, of course, no way of determining it accurately, but physiologists are agreed that it is no longer than three weeks, if as long, and that it may vary much in different individuals. The mass of pigment continuously excreted in urine and feces is hemoglobin in oxidized and hydrated form. In all probability some of the iron of the destroyed red cell is used over and over again in the manufacture of new corpuscles, but the bulk is excreted so that there must be a constant wholesale destruction and consequent generation of red cells going on normally all the time. This, with the fact that under ordinary conditions loss of blood is quickly made up without symptoms of trouble, is proof positive that the red cell is very short lived. Of the life history of white cells much less is known. It seems quite likely that the different forms may be different stages in its life history, and yet this cannot be proven; indeed, it cannot be denied that some forms at least, may multiply as all other cells do by karyokinesis, producing the same as well as differnt types. There is no charnel house for them like the spleen for reds. As a matter of fact it is not known what becomes of them. Some subtle influence, of which nothing is known now, is constantly at work keeping the number of both at a certain point, provided the physical conditions are the same and are normal. The same is true of the bulk of blood, notwithstanding the fact that periodically in the day large quantities of fluid of one kind or other are absorbed into the blood vessels. When we consider that the lymphatic system of vessels carrying twice the bulk of the blood in lymph, is directly connected at both ends, so to say, with the general circulation and that the flow of lymph is not uniform, it becomes still more astonishing that the mass of blood and the proportion of corpuscles, especially reds, remains so nearly stationary.

The condition known as plethora, cannot exist for any length of time, nor can the opposite condition. Both are associated with very grave symptoms when produced experimentally or by disease, as acute failure of compensation in heart disease or vaso-motor paralysis. A temporary serous plethora or dilution can be brought about by transfusion of fluid in large amounts or its introduction by mouth or rectum, but is very promptly changed by diuresis and diaphoresis. A temporary cellular plethora or polycythemia is sometimes seen in rapid blood regeneration during recovery from severe anemia, and for a short time after transfusion of blood. Temporary concentration has been observed when the diffusible elements of the blood, chiefly water, are rapidly carried away by such causes, as profuse sweating or purgation, acute diarrhea and deprivation of liquids.

Similar but fleeting effects can be produced by vessel constricting influences, pain, cold, emotional, or vaso-motor disturbances, suprarenal extract, and the like, but they last at most but a short time. Constant normal changes in blood concentration and dilution, even hemaglobin percentage can, however, apparently be determined to some degree by physical conditions, such as altitude, atmospheric pressure and conditions of humidity. They obtain only as long as these unusual conditions of environment continue. Hot and cold baths also materially affect the proportions of the blood. The former giving a higher count, the latter a lower in reds with increase of whites, and the change may continue half an hour or longer.

The more profound physiological changes are easily dealt with, but the lesser ones are often overlooked and when considered their value is difficult to gauge in the correction of observations made, and when further complicated, perhaps augmented, by the effect of disease processes, may make the single determination of corpuscles and hemoglobin of doubtful diagnostic value.

In most individuals there is a normal variation in red cells and hemoglobin during the twenty-four hours. For hemaglobin there is an average rise of 7.2 per cent. during the night and a fall of 7.4 per cent. during the day. This occurs in about 88 per cent. of normal individuals. Sometimes the rise and fall amount to 20 per cent.; sometimes there is no change. At other times in the same individuals the conditions are reversed, but then the variations amount to less than 2.5 per cent. The percentage of red cells follows that of hemaglobin, but is not so marked, and here the day fall is more frequent and marked than the night rise, and the times when no change occurs at all is greater in proportion. In all probability these variations depend more on the changes in the plasma than on an actual change in number of corpuscles, and if that be so, the changing proportion of hemaglobin in the chromocytes or red cells, which is the greatest change of all, is the thing to be accounted for and studied. We should consider, then, that the worth and number of the chromocytes is an unstable one, even in normal individuals, and is at times found to be above or below the mean.

There are subsidiary changes of rise and fall as well, due to work, digestion and absorption of food, especially marked in the last third of the waking hours. The condition before breakfast and before lunch are almost equal, so that this time of day is the ideal one for making observations.

During digestion the average worth of the chromocytes remains unchanged, but for two or three hours after there is a distinct fall in both cells and hemogobin in 70 per cent. of cases, a rise in 23 per cent. and no change in 7 per cent. (100 meals—B. L. and D.—of same weight and ingredients). In 47 per cent. there is a slight rise in worth at the beginning immediately after the meal, and also at the very end of the fall. This effect of digestion is probably mostly due to the fluid transfer—not of fluids ingested, however, and the hemolytic and hemopoietic function of the accessory organs of primary digestion. Perhaps the preliminary rise may be due to formation of digestive fluids. But this is quickly compensated for. The general fall is associated with fall in specific gravity, which is promptly corrected by renal elimination. Strange to say, the amount of fluid food taken has less effect on this fall of blood decimal than the kind of solid food taken.

The blood taken from different parts of the body surface does not always give the same results—indeed, often there is quite a difference in the percentage of cells and hemoglobin. Certainly it is not the same in all individuals. The blood of the toe is often not so rich as that of the finger, doubtless due to the fact that gravity keeps the lymph longer in dependent portions. Massage of the toe will bring the percentage up (see chart). Gravity has much to do with the composition of the blood. Experiments in posture changes prove this. Raising of the arm into horizontal position raises the percentage of the blood in it. When in recumbent position the legs are raised passively, the discrepancy between finger and toe percentage becomes still greater, the first rising, the latter falling markedly. But when the erect posture is resumed the normal finger percentage soon returns. Muscular effort always increases the percentage, due to increase in arterial pressure, but is followed by a fall below the normal. Massage and electricity increase the percentage probably by favoring onward flow of lymph and increasing transudation of fluid by augmenting blood pressure. General exercise increases percentage, but reduces worth. Severe prolonged exercise induces profound though temporary changes in worth, but is followed shortly by a general increase. Perspiration and lymph flow have much to do with this. In inactive individuals lowered blood pressure favors storage of tissue fluids, and the blood is poor, while in the regularly active, there is a smaller storage of lymph and the percentage of corpuscles and hemaglobin is permanently high. It seems therefore that in health the composition of the blood varies with the calibre of the arteries, that the variations of the former are largely influenced by the forces of the circulation, and that the physiological relationship between the blood and the circulatory apparatus, is as intimate as is the anatomical.

Considering all this, it becomes very apparent that the mere count of reds and estimation of hemaglobin at arbitrary times without careful consideration of the many factors which normally may influence them, can be little more, perhaps worse than useless.

Of the life history of the white corpuscles, and the occasion of its varied forms, very little is known. Its origin, function and fate are still unsettled, and the changes observed seem to have nothing to do with changes in the red cells. Among the mass of facts recorded about them, there is very little which seems conspicuously useful, principally because different observers have kept things unsettled by giving undue prominence to insignificant peculiarities of morphology and color reactions, and so have been led to give differing interpretations to perhaps the same or at least essentially similar conditions.

To show how important it is to go carefully in forming conclusions from counts, it is only necessary to remember that generally there is a preponderance of a certain type in the adult, while reverse conditions obtain in the young, that there is a constant change in number due to vaso-motor conditions of vessels. That muscular exercise increases them in the puerperal vessels. That during tranquil circulation they idly stick to vessel walls, but are torn loose by increased vigor of the blood current. Cold increases their number in the peripheral vessels. During pregnancy they gradually appear in greater numbers, especially in primipara, and in the new born they are found altogether out of proportion. No one has yet ventured a plausible explanation of these phenomena. In some individuals certain foods, especially albuminoids make the leucocytes appear in greater numbers. Probably this as well as the leucocytosis ordinarily following digestion, may be explained some day by chemotaxis. During digestion they may be observed at different ages to increase from 30 per cent to 100 per cent. and this, like in the case of reds, is probably not an actual change in the total percentage. Certain it is that in a general way, other things being equal, their constant proportion has something to do with the state of nutrition of the individual, and therefore like the red depends on the chemical condition of the plasma and its serum.

It seems plain enough, then, that the effect of different hourly and daily physiological conditions cannot be ignored in estimating the relationship between corpuscles and plasma, chromocytes and leucocytes and perhaps chromocytes and hemaglobin. The ordinary limits of variation must be first established before disease limits that are practically valuable indications can be made.

Now as to the mechanical difficulties. Accuracy in counts can be obtained with the Thoma-Zeiss instrument by being extremely careful in the measurement and dilution of blood drawn into the pipette. Those who have tried it often enough know how careful the operator must be to insure this. Then he must be extremely careful in mounting the drop to be examined. Unless the lines of Newton appear when the cover glass is applied the count will not be true. Moreover a very large number of squares must be counted in two or three drops to get a fair average. Variations of 10 per cent. in the same mixture are not only possible, but common. This implies certainly an hour's work. Add to this the care of the pipette, which is necessary after each operation, to insure good working, and it represents more time than the ordinary practitioner can or does give. In order to get a fair count of leucocytes still greater care in manipulating the larger pipette needed, is required. The bore of this tube is so large that the measurement is more difficult.

Cabott has suggested additional rulings on the counting slide, as shown in this diagram, so that they may be counted at the same time with the reds, and only one sample of blood need be taken. This would simplify matters greatly. The centrifugal method by the hematokrit depends largely in worth on the rapidity with which it can be done. But here there are many sources of trouble and error. In the first place the machine must be carried to the patient and the whirring noise associated with the rapid revolutions must be kept up two minutes. Speed and time must be uniform in every observation to get uniform results. But the greatest trouble arises from the fact that the tube must be entirely filled and placed in the machine before clotting begins. Here, as in the counting, greatest care must be exercised not to squeeze lymph out with the blood, and so attenuate it. Another source of error with the hematokrit, and one that has not been worked up is the varying elasticity and compressibility of the blood cells.

The most useful hemocytometer for ordinary routine is the one devised by Oliver. It is as accurate as any and more easily operated. He explains the principle on which it works after this fashion. When a candle flame is viewed through a glass-tube containing water a transverse line of bright illumination is seen, consisting of closely packed minute images of the flame, produced by the longitudinal fibrillation of the glass. A flat tube works better than a round one. Each corrugation acts as a lense and hence they make together a line of images. When some fixing fluid, like Hayem's is added to the blood it is more or less opaque or laked, according to the proportions of the mixture. This opacity shuts from view the illuminated line until on further diluting a definite point is reached, when it can just be detected as a delicate line across the tube. It was found that the development of this line by dilution is a very delicate indicator of the percentage of red blood corpuscles, and that the white corpuscles if not increased beyond 50 per cent. do not change its accuracy.

A fixed, very small amount of blood is taken in a small capillary tube, and the degree of dilution read off from a scale on the mixing tube. This scale is very carefully made with the Thoma-Zeiss instrument. (See cut.) By corking the tube the partially diluted specimen can be carried to the office to be examined at leisure and will keep for twenty-four hours.

Hemaglobin estimation has more of the personal equation in it as a source of error, as well as mechanical. Of course, it can be definitely ascertained by determining the amount of iron in the ash of a fixed volume of blood. But that is not practical, or useful to the clinician.

Spectroscopic estimation is also very accurate, but has the same objection of not being practical. The portable instrument devised by Hōnach requires altogether too much blood. This tempts and often necessitates the operator to squeeze the finger in order to get enough, and so a variable amount of lymph is added which cannot be estimated for in the result. The specific gravity method of Hammerschlag is ordinarily quite accurate and requires only a common urinometer outfit. The scale of the float should, however, be accurately standardised. Besides this, only a quantity of benzol and chloroform are needed with an ordinary pipette and stirring rod to complete the outfit. It depends upon the fact that specific gravity of blood runs parallel to the percentage of hemaglobin. Those who have used this method must have found with the writer that here too considerable care is needed to get results. If the inside of the glass is not absolutely dry the blood drops, which it is quite difficult to get into the mixture without air bubbles, will adhere to the side of the tube or pipette. Filling the drops with air can only be avoided by taking quite a quantity of blood with the pipette and so getting sufficient for several drops, one of which may safely be counted on as free of air. The operator must start with a mixture near the specific gravity of blood, else the time required in making the mixture will allow the benzol and chloroform to penetrate the drop, and he will have to begin over. Of course, in conditions in which the plasma is very much changed, *e.g.*, dropsical conditions, pernicious anemia, etc., and even in leukemia, in which the weight of whites interferes, this method is apt to be unreliable. Still, on the whole, it is more generally useful than most colorimetric methods, easier to manipulate and certainly less expensive.

Gower's hemoglobinometer is the simplest and cheapest instrument working on color comparison, but is less accurate than any, because it must be used with daylight. The specific color curve of diluted blood is much more complex with white light than with yellow, such as a candle would give, besides daylight is a varying uncertain thing. In daylight, as you will see from the diagram, the specific color curves of the blood consist of varying proportions of red, orange and yellow. In the lower percentages, 10 to 40, red as a separate color does not exist, it is only present in combination with yellow, as orange, made up of equivalent portions of each. In these lower gradations the place of red is taken by yellow. Between 40 to 50 yellow dies out and then red appears and progressively increases until at the highest grade it is the dominant color. In these daylight gradations the curve of orange is the predominant one, though it begins to die out in the higher part of the scale. In candle light the color curves are quite different and less complicated. Red is predominant throughout, except at the lowest grade, where it is subordinated to orange. From this point upward orange gradually diminishes and vanishes entirely at 90 while pure red distinguishes the highest grades. This remarkable difference is doubtless due to the predominance of yellow emitted from the candle flame.

The Fleischl instrument is the one of this group in most common use, but has the disadvantage of presenting a range of error of from 2 to 20 per cent., apart from the errors which come from differences in color, sensitiveness of different individuals. You are familiar with the instrument. The glass wedge, in the first place, does not correspond through its entire length with the color of corresponding dilutions of blood, especially not if daylight is admitted. Below 20 it is entirely unreliable. Then the portion of glass seen at one time through the cell presents a confusing variation of 20 degrees in its length. This can, however, be obviated by obscuring all but its center.

One of the most distracting features and a great source of error with many in the use of this instrument comes from the fact that blood possesses in a remarkable degree the quality of color, purity or brilliancy, which is a distinct quality from color depth and composition and remains after these have been duly matched, so that the color effect of the dilution can never be made to compare exactly with that of the glass wedge. Add to this necessary source of confusion, a more or less marked degree of lack of color sense, and it is plain that the reading is far too often much of a guess. Almost all these sources of unavoidable error are eliminated in the Oliver hemoglobinometer. Like the Fleischl instrument it requires candle light because of the peculiar color curve of blood. It consists of an automatic blood measure holding 5 c.m.m., which is larger and stronger than that used with the Fleischl. It is also much easier cleaned by drawing a needle and thread through it. A mixing pipette, with rubber nozzle fitting over the measuring tube insuring complete rinsing out of blood with the first few drops of water. A blood cell with cover of lower grade of blue glass, which does away with the confusing brilliancy of the solution and still does not disturb the correct reading. Two sets of standard gradations—six in each—which represents the divisions of 10 degrees of the scale and are carefully standardized. The intermediate points are obtained by riders placed over the standards bringing the reading down to 1 per cent. or less. When they are in use the colorless cover is placed over the cell to balance the effect of the mere layer of glass of the rider. An ordinary small Christmas candle is used for light, excluding all other and the observation is made through a camera tube. It has been found that resting the eye by looking through green glass makes the retina more sensitive to slight differences in color and some instruments have a disk of it attached to the camera tube. The findings with this instrument are most accurate and are quite readily obtained. Unfortunately, it is more expensive than the Fleischl, but much more portable and durable.

It cannot be denied that the examination of blood as it is usually done at the present time, cannot possibly give uniformily reliable results. The clinician must not rely on any and everybody's findings if he would get help and be safe, and especially must he guard against being led astray by the enthusiast.

Nevertheless, any careful, unbiased physician, no matter how busy, who possesses a little knack in handling instruments and the ordinary amount of patience can get very useful information and help by studying the blood in at least all chronic diseases and all disorders associated with fever. A specific gravity outfit for hemoglobin, an Oliver tintometer or hemocytometer, and a box of coverslips, with a microscope, are all he requires to do good work, if he will remember that digestion, exercise, emotional states (vaso-motor disturbances) position, and last but not least, individual peculiarities, etc., have to be considered when interpreting the findings.

I cannot fairly close this subject without saying just a word about the bearing of chemical conditions of the plasma as producing these secondary effects on the cellular elements which we are to some extent able to estimate. We rate the importance of the red cell in the function of exchange of gasses (as far as we know now its only function) altogether too high. It is a fact that reduction of reds and even lessening of lung capacity, if not extreme do not materially modify exchange of gasses. Anemic and leukemic people handle as much O and CO_2 as any. Rapid breathing, rapid pulse and lessening of muscle work compensate very efficiently, and yet with this function of the reds within a physiological limit of function, disease processes continue. How then can the mere knowledge of the percentage of cells be of any great value directly, in the treatment of the patient? The health, usefulness and longevity of the red cell, its composition and ability to retain hemaglobin are determined by the chemical condition of the serum. Until we know more about the physiological and pathological chemistry of the blood, we can know little of the meaning of corpuscular changes.

The red cell is very little concerned in carrying CO_2. In the normal state it does carry a little on its return voyage, but only an insignificant proportion, some 10 volumes in a 100 of the total excreted. The bulk of CO_2 is in loose and firm chemical combination in the carbonates and phosphates of sodium salts in solution in the serum. Even globulin combines to some extent with it. The

The open method was popularised in the earlier history of abdominal section work. When simply done with a glass tube and made efficient by long nozzled suction syringe, it performed the task efficiently. It is a mistake to suppose that by organised lymph the withdrawal of serum, blood or blood clots cannot be successfully employed for twenty-four hours after operation. Practice proves the contrary emphatically. This drainage may be supplemented by strips of gauze and gauze packing may be necessary to check hemorrhage from oozing surfaces, or gauze alone, or enclosed in smooth tissue, may only be required, unless blood clots or an ugly suppurative pocket be present. Gauze drains act as syphons and fail to act unless sufficient external gauze or other absorbent is placed on the outside. Their work is less at bottom of cavity in proportion to the distance of their length and their action is not essentially from the bottom of cavities as is the drainage by the long nozzle syringe and glass tube. Either form draws by planes of peritoneum from long distances latterly and above. So long as the gauze drains act and the external dressings are wet, the prognosis is good. If sepsis or shock is overpowering, the gauze will be found dry. It is not safe to follow fads or fashions in abdominal work; prove all things, hold fast to that which is good, make it possible to render classical, work that seems to be full of incongruities. The tide turned from the open to the closed methods. Our best friend, the peritoneum, was found to care for some filth. Special glands were discovered to make the result sure. Dangers from clot, disintegration were no longer bugaboos. It mattered not that these glands were high up in the posterior abdominal peritoneum; the patient was sufficiently inverted to render the work of the glands profitable, changing pathological to normal conditions. Again the fashion shifts, notwithstanding that "truth is eternal." The resort to closed methods could not have satisfied, for the vaginal route became popular. It was not a happy change, but it was a new shrift and permitted of a covered retreat from the untenable and scientific principles of closing wounds when no such principle had succeeded in similar class of cases elsewhere in the human body. In the depths of the vagina a narrow space in darkness or with insufficient light, work of small but Herculean character and import was undertaken. Normal structures in pathological conditions were jumbled and fumbled, and wriggled and twisted, from their previous relations, and then drainage added its factor of confusion or luckily aided nature to relieve herself of the products of disease. At each of the second and third epochs of abdominal section, the advocates of the change of fashion advised that the past methods were a mistake and that no one now used them. A prominent author announces that tube drainage and gauze drainage have been given up. A prominent operator announced recently that he then had six drainage cases in his hospital at that time. Out of this confusion the truth must come. Is it safe to pray except to be delivered from our friends? Such conditions indicate the first chaotic struggles for a scientific basis of opinion. The truth is not with us, but is about us. Dogmatism, opinionated self utterances with the accent on I, me, my, and mine, are dangerous. Drainage is often necessary and if more often employed, more permanent cures would follow. Thorough cleansing of the peritoneum by gauze and aseptic gauze sponges, after stopping hemorrhage and oozing with pressure ligatures and hot ablutions, washing foul surfaces and cavities, is a safe plan. To do less than this by depending on peritoneal activity and absorption in the pelvis, or behind the bowel or stomach, as in the plan for raising the hips and disseminating toxins over a large surface or surfaces, is pernicious, even though the parts be provided by natural stomata for use at this period of pathological activity, is to do less than plain common sense should dictate and less than correct principles of procedure demand. The pain caused by blood clots and effusion is in direct porportion to their amount unless a hebetude of mind is coëxistent with hemorrhages, coma or collapse. Because the peritoneum will digest and absorb is no reason why it should be asked to do so. The advocates of closing abdominal incisions base their conclusions on statistics of their own work which deductions might be different if collated by other observers, like the proving of drugs by different men. The wave of vaginal route work may be caused from dissatisfaction with the results of closing in methods for vaginal vault puncture is a logical sequence of stasis of fluids and filth accumulations in the pelvic basin where the peritoneum has failed to perform the function it has found to be too onerous a burden with which to be superimposed under circumstances of shock or exhaustion not fairly estimated or impossible to apprehend. To watch carefully a well cleansed case when well drained and compare it with the opposite, should convince by indisputable argument and indubitable evidence that the former is best. It is a poor argument when life is at stake and scientific principles involved, that such and such systems of drainage are good but not feasible. Change the plans of institutions, of care, of systems, any or all, but do the best. If a wound must be closed that the infection from an aggregation of patients of a cosmopolitan type, the operation should not be done under such circumstances. It is better to leave the patients in courts and alleys, in their various residences or to place them in especially planned hospitals with such a system of care as is required. It is honest to admit the truth and better to try to fit the remedy to the condition than to suit the condition to the remedy. Better to improve the system and measure to it than to abandon principle to feasibility and grope around in uncertain lights after new methods that presuppose unchangeable bad premises. No pains should be spared to meet the indisputable laws of drainage and cleanliness. No dependence should be placed on the valuable functions of peritoneal absorption, except the least that can be laid thereon. To ask more requires the explanation of special function, demands a fuller comprehension of existing conditions of repair, activity of cell life, recuperative powers and factors of ocult functions of organs remote from the peritoneum, as well as peculiar to it, that cannot be estimated at time of operation or previously with any certainty.

A clean, well drained case is a safe and comfortable case or can be made so. The proposition is proven as to cleanliness by every law of surgical procedure since the master Tait first enunciated them. As to comfort, ask the nurse who watches the drained or the undrained case. The undrained cases are restless, have anguished, excited faces, require constant relief and attention to divert their minds and bridge over time, till the faithful peritoneum absorbs the irritating products of effusion, hemorrhage or pathological products, if it does it. The drained cases are quiet, often have composed, frequently smiling countenances and with red, not blanched lips, calm, not excited eyes, placid, not anguished countenances, relaxed not tense muscles, low, not high nerve tensions. It gives a picture that pleases and not makes anxious the surgeon, who should watch such features of the case with an acute eye to learn a system that shall conduce to comfort and brings an argument that oceans of theories cannot gainsay nor unsettle.

It is given as a rule that suppurative cases, with adhesion, adhesion cases with much oozing, require drainage. The advocates of the closed method appear to wish to limit these rules and maintain that a portion of these conditions exclude the necessity for drainage. Lives are lost needlessly when the rule to drain all bad and all border line cases and to close only the very clean and very dry cases is broken. No prejudice, no bias, no fashion, no fad, should interfere with this simple, plain, efficient, thorough, systematic, successful methods of drainage. Let the serum, the blood, the pus flow or be drained without by drains and let the alimentary tract by the free inhibition of water and the supplementary lavage of the rectum and large bowel, supplement the artificial drainage. Thus all the forces that can be applied by art and nature are combined to assist nature to rid herself of harm and re-instate normal functions and restore the organs and parts to health.

Society Proceedings.

MEDICAL ASSOCIATION OF CENTRAL NEW YORK.

REPORTED BY C. A. VANDER BEEK, M. D., Secretary.

THE thirty-third annual meeting of the Medical Association of Central New York was held at the Genesee Valley Club, Rochester, N.Y., on October 16, 1900.

The meeting was called to order at 11.00 a.m., by Dr. JOHN GERIN, president.

Dr. VAN DER BEEK, Secretary.—Inasmuch as the minutes of the preceding meeting have been stenographically reported and printed in the transactions, I would move that the reading of the minutes be dispensed with. Seconded. Carried.

The president appointed the following committees:

Credentials.—A. L. Beahan, Ontario; W. J. Herriman, Monroe; J. C. Fisher, Chemung.

Business.—D. M. Totman, Onondaga ; J. P. Harley, Cayuga; F. S. Crego, Erie.

Reception.—C. A. Van der Beek, E. B. Angell, W. S. Ely, T. Oliver Tait, Wm. M. Brown, Monroe.

Ethics.—Marion Craig Potter, Monroe; Charles H. Richmond, Livingston; M. L. Bennett, Schuyler.

Publication.—Wm. C. Krauss, Erie; C. A. Van der Beek, S. L. Elsner, Monroe.

Legislation.—John W. Whitbeck, E. V. Stoddard, Monroe; Nathan Jacobson, Onondaga; John Gerin, Cayuga; C. M. Lee, Oswego.

The PRESIDENT.—The committee appointed last year to take into consideration the advisability of changing the name of this Association, I believe, is prepared to report.

Dr. E. B. Angell, Monroe.—The committee was asked to report upon three points:

First, with reference to the advisability of changing the name of the Association, and if it was so desirable, substituting for the name "Medical Association of Central New York" the title, "Western New York," or "Central and Western New York."

Second, with reference to the date of the meeting. It seems that the date of the meeting, the third Tuesday in October, is the same date as the beginning of the State Medical Association. Some of our members wish to attend that meeting, and dislike being absent from this, therefore they asked that the date might be changed.

Third, the treasurer suggests that some measure has got to be adopted in order to replenish the treasury within the next year or so, at least, and the Committee was desired to make some recommendation with reference to that point.

Your committee has had a meeting and makes the following recommendations:

1. That the name of the Association be changed to "The Medical Association of Central and Western New York."
2. That the date of the meeting be changed to the fourth Tuesday in October.
3. That the Treasurer be directed to send bills for annual dues to all permanent members.

(Signed) Nathan Jacobson.
Edw. B. Angell.
Wm. C. Krauss.

The fourth Tuesday in October does not conflict with the dates of any County Medical Associations, or any of the State Associations or National Associations, so far as your committee can find out. Therefore, your committee recommends that the date of the meeting be changed to that of the fourth Tuesday in October instead of the third Tuesday in October.

With reference to the dues, the committee recommends that the treasurer be directed to send bills for annual dues to all permanent members, whether they are present at each meeting or not. It has been the custom, I understand, in the past, to ask only those who attend the meeting to pay the annual dues of $1.00. Inasmuch as the Association has undertaken the burden of publishing the transactions each year and sending a copy of such transactions to each member who pays annual dues, it is considered only proper that each permanent member pay his dues and receive his copy of the transactions. Therefore this recommendation is made, that the treasurer be directed to send bills for the annual dues to all permanent members. That does not include the delegate members, only the permanent members.

With reference to the penalty that shall follow nonpayment of dues, that will be well to leave for the future to determine how successful the treasurer shall be by simply sending out his due bill.

Therefore, Mr. Chairman, these are the recommendations made by the committee. The first two recommendations are changes in the constitution, and notice will have to be given of such changes, and will lie on the table for one year. The third recommendation is more in the nature of a by-law, and I understand the society is competent to adopt that at any time.

Therefore, I give notice that I will move at the next meeting the adoption of these two suggestions with reference to changes in the constitution at the next meeting.

The third recommendation, with reference to sending bills out to all permanent members for annual dues, I believe the society can take action upon.

Dr. F. B. **Sears**, Onondaga.—I move the report be adopted. Seconded. Carried.

The President, Dr. **John Gerin**, of Auburn, then read his address on Electricity.

The following papers were read and discussed:

Autoinfection as a factor in diseases of infants and children, J. Roberts Johnson, Syracuse.

Report of a case of sarcoma of the tonsil and its removal by external pharyngotomy, Nathan Jacobson, Syracuse.

How eye-strain causes headache, Lucien Howe, Buffalo.

Empyema, and its treatment in children, M. L. Bennett, Watkins.

Some mistaken impressions regarding troubles of the genito-urinary organs, J. Henry Dowd, Buffalo.

The longevity of the gonococcus, E. Wood Ruggles, Rochester.

The association adjourned for luncheon at the invitation of the Monroe County Medical Society.

AFTERNOON SESSION.

Meeting called to order by the president at 3.25 p.m.

Treasurer's report read and accepted.

The **President**.—Are there any other committees to report?

Dr. E. B. **Angell**, Monroe.—I wish to make a supplementary report from the special committee appointed last year, and that is to this effect, that in discussing the matter with some of our Buffalo members, it has been deemed quite advisable to hold a meeting of two days' duration next autumn. It seems that the meeting is to occur in Buffalo, in accordance with the regular program, and that Buffalo is to hold a large exposition next year. The Buffalo men desire to show us something of the city and something of the exposition, as well as to have us listen to papers. Therefore, they have asked, or it has been suggested that they hold a two days' meeting, and for that reason, the committee recommends a suspension of the rules and by-laws of the association for the coming year, so as to enable the Buffalo committee to arrange for this meeting at such date in the autumn as they may find expedient.

The date according to the one suggested by the committee would be the fourth Tuesday in October, if that is adopted, and that is rather late in the autumn for the exposition, which closes the 1st of November. For that reason, it would be wiser to have the meeting occur earlier in the autumn, perhaps the last of September or first of October, so that this suggestion is made, that the Association suspend the by-laws for this next year. I make that as a motion, so that the committee of arrangements in Buffalo can arrange for the meeting at such date as they find most expedient, to be announced by that committee.

Seconded by Dr. Wm. Brown, Monroe. Carried.

The PRESIDENT.—The committee, as reported by Dr. Angell this morning, made certain recommendations, which contemplate a change in the name of the Association. Doctor, would you please state those recommendations again?

Dr. E. B. ANGELL, Monroe.—The first recommendation which must be taken up, of course, now, is that the name of the Association be changed to "The Medical Association of Central and Western New York, to take the place of "The Medical Association of Central New York."

Dr. A. L. BENEDICT, Erie.—I would like to amend by substituting the word "Society" for "Association." Seconded.

Dr. E. B. ANGELL, Monroe.— I don't see that we are going to gain anything by the substitution of "society" for "association." This has been known as the association for the last thirty years, and unless there is good reason for making that change, I should be opposed to it personally.

Though I made that report and moved its adoption, I am opposed to making any change in the name of the association. I don't believe we are going to gain anything by adopting the name of "The Medical Association of Central and Western New York." It is awkward, inconvenient and the association has done very well in its present form. The only change to make would be to call it "The Association of Western New York," which would no longer identify it with the old association, and this organisation, founded by Dr. E. M. Moore, of Rochester, and Dr. Didama, of Syracuse, goes by too good a name to have it altered. I am opposed personally to any change.

Dr. F. S. CREGO, Erie.—I think if there is to be a change, we should make it "The Society of Central and Western New York," so that it may not conflict with "The Central-Western New York Medical Association," which is a branch of the State Association. The most of us are affiliated with the State Society, and I think, if you change at all, we ought to make a complete change, so as not to get mixed up with the State Association. However, I think Dr. Angell's suggestion is very good, to leave it as it is.

Dr. WM. C. KRAUSS, Erie.—At the Auburn meeting, two years ago, I think, I suggested a change to "Central and Western New York," because all the county societies in western New York are now members of this association; and with the exception of a few counties, east of Monroe, we haven't any membership; it seemed to me at that time but just and right to include those western counties in this association, and then to change the name to "Central and Western New York." I think the change of the word "association" to "society" is not advisable, and I will stand by the report of the committee.

Dr. A. L. BENEDICT, Erie.—I would like to say this, that personally, I agree with Dr. Angell, that it is better not to change at all; but if we do change, we ought to use the word "society," because our delegates come from the county societies, and as it has been said, we are more affiliated with the society than the association, and, unfortunately, the two words are not entirely synonymous. If we make this change at all, we ought to do it in keeping with the nomenclature, especially as long as county associations are being formed as well as county societies.

Dr. WM. BROWN, Monroe.—I feel very much as has been expressed by Dr. Angell and Dr. Crego, that the name of the society is very well let alone, and I would make a motion, that the matter be laid on the table indefinitely. Seconded. Carried.

Dr. E. B. ANGELL, Monroe.—The second change recommended by the committee was with reference to the change of date. It was recommended that we meet on the fourth Tuesday in October rather than the third Tuesday in October. The third Tuesday in October is late enough, and I believe that an earlier date than that would be inadvisable. Therefore, personally, I am opposed to the change; while, for the sake of bringing it before you, I move that the recommendation of the committee be adopted.

Dr. F. B. SEARS, Onondaga.—Inasmuch as next year is left to the discretion of the committee, I move that that be laid over until then, when we will know more about it. Seconded. Carried.

Dr. E. B. ANGELL, Monroe.—The further recommendation was with reference to the matter of collecting the dues. It was recommended that the treasurer send a bill of dues to each permanent member of the association hereafter, in place of only requiring those to pay who are present at the meetings. The adoption of that, I move. Seconded.

Dr. A. A. YOUNG, Wayne.—I would like to ask if the payment of those dues are to be made obligatory or not; and whether, if not paid, the names of the members would be dropped from the roll?

Dr. E. B. ANGELL, Monroe.—That has not been included in the motion. That will be for the further consideration of the society at a later date. We will simply see how this will work.

Dr. C. A. VAN DER BEEK, Monroe.—I would like to say that the expenses of the secretary have increased from about $28, five years ago, to about $59.00 now. If the expenses of the treasurer increase in like propertion, I think we will have to assess each one $2.00 instead of $1.00.

Dr. E. B. ANGELL, Monroe.—I would further explain that when the association started to publish its transactions, it had $280.00 or $290.00 in the treasury. That has been gradually used up, there being debts each year, until the capital of the association last year, at the meeting in Syracuse, was $74.00. It so happens that this year, we are a little ahead, but that doesn't always follow. We have got to publish shortly a copy of the constitution and by-laws and a list of the members, which will require a large amount of money, and it is for this reason, I think, that we ought to be forewarned in regard to the possibility of having an empty treasury. It is true that if any member who is not present at the Association will forward a dollar, he will get a copy of the transactions.

Dr. S. L. **Elsner**, Monroe.—In giving the report, there was a balance of $124.00, but two bills came in today, which foot up between $58.00 or $59.00. Those were not put in that report. That would leave really a balance of about $70.00 in the treasury; and it is a fact that the expenses are growing heavier every year; and the registration, though large today, has not been this size, nor has the same amount of money been taken in at any former meeting in some time.

Motion of Dr. Angell carried.

Dr. E. B. **Angell**, Monroe.—I am sorry that the Syracuse member of the committee was not present, but the Buffalo member, Dr. Wm. C. Krauss, and myself, in discussing the matter, believed it would be unwise and inexpedient for the society to meet at all in Auburn, except by special invitation. I am very sorry to come to that conclusion, not because we were not well entertained in Auburn, but because it is a very hard place to reach. Therefore, I give notice that at the next meeting, I will move an amendment to Article II. of the constitution, so that hereafter we shall meet annually, in turn, at Buffalo, Syracuse and Rochester.

The **President**.—The secretary suggests that authority be given for publication of a revised constitution and by-laws, also a membership list. The Secretary might perhaps say something on that subject.

Dr. C. A. **Van der Beek**, Monroe.—I would say that the Secretary has just three copies of the constitution and by-laws and applications are being made frequently for copies which the secretary cannot supply. Now, there are going to be some changes made, I believe, in the by-laws, or in the constitution. I would make as a motion that the publication committee be authorised to have a new copy of the constitution and by-laws printed, which will include a revised list of the members.

Dr. Wm. C. **Krauss**, Erie.—Inasmuch as changes have been proposed in the constitution, I think it would be well to defer this for another year. Then we will have the constitution revised to date. Notice has been given today of an amendment.

Dr. W. J. **Herriman**, Monroe.—I beg pardon for not rising earlier, before you started, but notice has been given us today that at the next meeting of the association, an amendment to the constitution will be offered, changing the name of the association. Whether the amendment will go through or not at the next meeting, it seems to me that that is sufficient reason for deferring the publication of the new constitution and by-laws until another year and until action shall be taken upon that proposed amendment.

Dr. C. A. VAN DER BEEK.—I think Dr. Herriman and Dr. Krauss are right, and I withdraw the motion.

The election of officers for the ensuing year resulted as follows: President, Lucien Howe, Erie; vice-president, A. L. Beahan, Ontario; second vice-president, Ezra B. Potter, Monroe. The secretary and treasurer hold over until next year.

Dr. C. A. VAN DER BEEK.—I would move the election to permanent membership of Drs. F. A. Farshee, Cortland; E. P. Ballantine, J. S. Berkman, C. A. Greenleaf, J. M. Ingersoll, M. E. Leary, E. G. Nugent, J. D. Ozmun, A. C. Remington, J. H. Sullivan, Cornelia White-Thomas, A. W. Thomas, Geo. H. White, Monroe; H. C. Baum, A. W. Hedden, G. G. Lewis, C. E. McClary, R. C. McLennan, G. M. Price, A. S. Ruland, F. W. Slocum, Onondaga; D. S. Allen, Wm. A. Howe, Ontario; Harriet M. Doane, Oswego; R. E. Doran, Seneca, all of whom have complied with the requirements. Seconded. Carried.

The reading of papers was then resumed:

Presentation of a case, S. L. Elsner, Rochester.

Syphilis of the nervous system, Floyd S. Crego, Buffalo.

New method of quantitating proteids in gastric digestion, A. L. Benedict, Buffalo.

Bromides in epilepsy, A. Pierce Clark, Sonyea.

A report at the Buffalo laboratory in the investigation of cancer, Henry R. Gaylord, Buffalo.

Cirsoid aneurism of the ear, Wm. S. Cheesman, Auburn.

Abdominal drainage, A. L. Beahan, Canandaigua.

Some points in the toilet of the peritoneum, Charles E. Condgon, Buffalo.

Asthma in its relation to localised disease of the nose, John O. Roe, Rochester.

Dermatitis exfoliativa, Wm. A. Howe, Phelps.

Report of a case of fibro-myxoma of the abdominal wall, with exhibition of the tumor, Thomas Jameson, Rochester.

Fitting trusses, M. A. Veeder, Lyons.

The following papers were read by titles:

Surgical treatment of injured nerves, E. B. Angell, Rochester.

Alcoholism, F. E. Fronczak, Buffalo.

Importance of sugar in disease, Charles H. Richmond, Livonia.

Formalin, A. A. Young, Newark.

Vivious tendencies in therapeutics, Brace W. Loomis, Syracuse.

Tubercular disease of the brain, Wm. C. Krauss, Buffalo.

The importance of the position of medical examiner for life insurance, F. W. Maloney, Rochester.

Rheumatism, L. A. Weigel, Rochester.

The relation of rectal disease to chronic constipation, D. H. Murray, Syracuse.

At half past seven o'clock in the evening the members of the association were the guests of the Monroe County Medical Society at a commers, at the Genesee Valley Club House, and enjoyed the hospitalities thoroughly. The glee club of the University of Rochester aided not a little in making the evening a most pleasant and enjoyable one.

BUFFALO ACADEMY OF MEDICINE.

Section on Pathology, September 18, 1900.

REPORTED BY F. W. McGUIRE, M. D., Secretary.

THE first meeting of the year of the section was held at the Academy rooms, Public Library Building, Tuesday, September 18, 1900, twenty-seven Fellows being present.

Dr. **EUGENE A. SMITH** in the chair, called the meeting to order at 9 o'clock p.m.

The minutes of the previous meeting were read and approved.

The essayist of the evening was Dr. H. G. **MATZINGER**, who read a paper entitled, Blood Examinations. (See page 319.)

Dr. **ALBERT E. WOEHNERT** said he agreed that great care should be used in technique, as errors were usually attributed to carelessness in this direction. He also thought that blood examinations had proved to be of more value from a diagnostic rather than a therapeutic standpoint. He considered the specific gravity method the most accurate in estimating hemaglobin.

Dr. **JULIUS ULLMAN** said he ordinarily made a rough examination, first, by placing some fresh blood on a slide, and if he found over six or seven polymorphonuclear white cells in a fluid he then made a more accurate examination as to leucocytosis.

Dr. **CHAS. S. JEWETT** thought we ought to be conservative and not to consider the examination of the blood alone, but to consider it in connection with the symptoms of the case.

Dr. A. L. **Benedict** uses the centrifuge in estimating hemaglobin. He uses both tubes, and if there is a difference of more than 1 per cent, he discards the test and makes another attempt. He does not like the specific gravity method. To be thoroughly accurate it is necessary to estimate the amount of iron in the blood.

Dr. **De Lancey Rochester** cited an obscure case in which the diagnosis was proved to be malaria by the blood examination. He said, in cases of diminished hemoglobin, iron should be used, but where there is a diminution in the number of red cells, arsenic should be used. He further cited a case in which a diagnosis of pus in the abdomen was made through the examination of the blood.

Dr. J. W. **Grosvenor** wished to know if, in Dr. Rochester's case, there was any other condition present which could account for leucocytes.

Dr. M. **Hartwig** cited a case and spoke of the advantages of blood examination.

Dr. **Frost**, Buffalo State Hospital, exhibited a specimen of rupture of the heart.

Meeting adjourned at 10.30 p.m.

Section on Medicine, October 9, 1900.

Reported by JULIUS ULLMAN, M. D., Secretary.

The first regular meeting of the section on medicine for the year was held in the Buffalo Public Library Building, Tuesday evening, October 9, 1900, the chairman, Dr. **Eli Long** presiding.

Dr. **William G. Spiller**, professor of nervous diseases, Philadelphia Polyclinic, read a paper on The involvement of the nervous system in malaria. He reported a case of malaria presenting the symptoms of disseminated sclerosis, and showed microscopical slides of the tissue.

He referred to a number of clinical papers in which monoplegia, paraplegia, hemaplegia, aphasia, convulsions and tremor were reported as occurring in persons with malaria. The diagnosis in these cases was frequently made only from the results obtained by the administration of quinine, and syphilis was not always excluded. It is probable, however, that these disturbances may result from malaria. The malarial parasite has been found within the central nervous system by some observers, but never previously in a case with the symptoms of disseminated sclerosis, and the real nature of this so-called malarial disseminated sclerosis has hitherto been unknown. Dr. Spiller referred to the various pathological conditions found in the nervous system in cases of malaria, and reported a case in which the symptoms were: a marked intention, tremors of the left upper limb, transitory hemiparesia, diplopia, marked ataxia of the left lower limb, marked vertical nystagmus, distinctly scanning speech and exaggerated tendon reflexes on the right side. The man, a sailor, died after a severe attack of diarrhea, probably of malarial origin.

In the microscopical examination every capillary of the central nervous system was found plugged with pigmented malarial parasites of the estivo-autumnal form. An area of slight sclerosis was found in the outer part of the middle third of the left crusta and the right crossed pyramidal tract was slightly but distinctly sclerotic. The most probable cause for this slight sclerosis of only one motor tract was probably small hemorrhage of early formation. This view was confirmed by the presence of numerous small recent hemorrhages and altered blood pigment with the central nervous system. The only apparent cause for the hemorrhages was found in the presence of the malarial parasites. No area of disseminated sclerosis was seen. The case shows that the symptoms of disseminated sclerosis occurring from malaria probably are the result of vascular lesions. It is not improbable that similar symptoms occurring rapidly after infectious diseases, such as typhoid, may sometimes be the result of poisoning of the nerve centers and not of true disseminated foci sclerosis.

DISCUSSION.

Dr. Charles Cary: The study of malaria is becoming very important to us, because many cases are bound to come to us now because of our new possessions in the tropics. Malaria in Buffalo is imported. I have seen few, if any, cases of malaria that are not imported. There are no anapholes in Buffalo.

Dr. Cary urged the theory that the transitory symptoms (nervous) in malaria are not due so much to a degeneration as to a fulness of the vessels with the blood corpuscles and the parasites. This favors an arrest of circulation and a temporary thrombosis. The healthy corpuscles clear out this temporary thrombosis and this may account for symptoms varying from a few hours to days. The cause of graver symptoms is to be looked for in the location of the blocking of the circulation.

Dr. JAMES W. PUTNAM maintained that malaria is the cause of many nervous diseases, such as disseminated sclerosis, hemiplegia, multiple neuritis and the like. He stated that lately it has been suggested that infectious diseases may be contracted for the cure of nervous diseases and because some few epileptics who contracted malaria are apparently benefited, some are sending epileptics into malarial districts.

Dr. H. U. WILLIAMS questioned the author as to the toxic action of the malarial poison producing degenerative changes in the ganglion cells.

Dr. MARCEL HARTWIG asked concerning the pathological anatomy of supra-orbital neuralgia following malaria. He seems certain that such exists and has seen it in patients in whom, however, no parasites were sought.

Dr. ARTHUR BENNETT stated that he observed hyperplasia in malarial supra-orbital neuralgia and observed also that one eye lies higher than the other.

Dr. GAYLORD asked concerning the fibrin formation in the thrombi.

Dr. E. E. BLAAUW asked why the sclerosis in Dr. Spiller's case could not just as well be attributed to the early history of syphilis in the case.

Dr. MARSHALL CLINTON reported the case of an officer in Cuba who while riding his horse was seized with a chill and afterward became delerious. The first attack lasted eighteen days. On the twenty-first day after the first attack the patient had another severe chill and died in six hours. Necropsy showed a serous apoplexy. The lateral ventricle was distended, there were petechial hemorrhage of brain. No malarial organisms were demonstrated.

Dr. W. G. SPILLER in conclusion, stated that all vessels thrombosed in this case must have been in this condition but a short time before death, for if this persisted it would show a degeneration of nerve cell. This case was not diagnosticated or treated as malaria during life. Dr. Spiller could not state that toxemia was a factor in this case. He found no change in the nerve cells.

Cases are reported of supraorbital neuralgia, due to malarial infection which improve on quinine, but no parasite is found in the blood. He quoted Thayer, who does not believe this neuralgia to be due to malaria. He did not examine the sections for fibrin, so that cannot answer as to fibrin formation. As to syphilis in this case, he could not detect any of the changes of syphilis in the vessel walls of the central nervous system. In this case there was only a very slight sclerosis, due to a former hemorrhage.

On motion of Dr. Wm. C. Krauss, seconded by Dr. Hartwig, a vote of thanks was tendered to Dr. Spiller.

Number in attendance, 50. Adjourned 10.30 p.m.

Section on Ophthalmology, Otology, Rhinology and Laryngology, October 22, 1900.

REPORTED BY GEORGE F. COTT, M. D., Secretary.

Meeting was called to order at 9 p.m. Dr. F. W. **Hinkel** in the chair. Minutes of previous meeting adopted.

Dr. E. E. **Blaauw** presented a case of a girl aged 20, who had total absence of abduction. The affection is of long standing, although the patient had never noticed any trouble. She consulted Dr. Blaauw on account of headache. The condition may be congenital, or acquired in early youth. The trouble may be muscular or nervous; if the latter, it is neither the central or peripheral.

Dr. **Snow** reported a case of retropharyngeal adenitis, and two cases of retropharyngeal abscess occurring in young children.

DISCUSSION.

Dr. E. A. **Smith.**—The essayist has covered the subject so carefully and thoroughly, that it is hardly necessary to say any more. My impression in that case was somewhat different. I would follow a different procedure and give chloroform next time. Of course, that is theoretically easier to carry out than it seems. I could not detect fluctuation, when I examined the patient. I hesitated somewhat and thought it best to wait till morning. I did not feel anxious to operate that night. No doubt the mouth-gag had something to do with the death. If I felt certain of abscess, I would have plunged a knife in without hesitation. This case was either one of retropharngeal or postmediastinal abscess. I have only met one case of retropharyngeal abscess before, and that was post mortem, in which no diagnosis was made. It was found to have been due to caries. If I should meet another similar case, I should anesthetise, do a tracheotomy, and then open the abscess. I want to see where aspirator or bistoury is going. By feeling, the bulging seemed to be more like sarcoma, considering also other symptoms. Death was probably due to septicemia.

Dr. Chauncey P. Smith.—I think Dr. Snow covered the ground thoroughly. We must consider the acuteness and chronicity of these abscesses. Acute abscesses get well while the chronic or tubercular take many months to improve. Postmediastinal abscess may be extremely hard to palpate, being so low, and then there is the danger of mediastinal infection, owing to the fact that it is better to open from the outside when there is no danger to it; a grooved director is to be used, which makes the operation quite safe, or all the vessels and nerves may be pulled forward and then the abscess opened that way.

Dr. A. A. Jones.—I would like to ask what percentage of cases of retropharyngeal abscess are connected with caries of the vertebra.

Dr. F. W. Hinkel.—The report of these cases calls to my mind the case of a child ten months of age, in which there was distinct pointing of the abscess externally after two weeks sickness. Dr. Park opened externally. Dr. Hopkins also saw the case. There was slight hemorrhage in the throat, back of the tonsils blood was trickling down the pharynx. The wall was so thin that one could distinctly feel the touch of the thumb and finger. I recommended the replacing of the dressings. The child was very feeble and poorly nourished and finally died. The abscess pointed just below the ear. Chloroform is recommended by some authorities. There is certainly no theoretical objection. It is interesting to note the association of adenitis with nasal inflammation.

Dr. Snow.—Regarding the percentage of cases, Bokai saw 600 cases, of which 120 were due to caries; the remainder were idiopathic, due to infection from the throat. My paper was on idiopathic abscesses.

The mortality of idiopathic cases is only 4½ per cent. by Bokai. The operation of opening is very quickly done, he being very expert, having had more experience than any living man, and had no accident reported; in abscess low down, however, I can readily see the danger.

Then followed the paper by Dr. Ullman on

THE TONSIL AS A PORTAL OF INFECTION.

He referred to the pharyngeal tonsil, the tubal tonsils, or cushion of the Eustachean tube, the faucial or true tonsil, and the glossic tonsil, after simply alluding to the anatomy. The physiology of this tissue was also alluded to, their importance as blood-making organs and the protection which they give the body in health by the filtration and attenuation of organisms.

The author then showed how these organs were constantly exposed to the pathogenic organisms found in liquids, air and food, and the nasal and buccal secretions. He referred to the works of Buschke, Schlenker, and others, to prove that pus-producing organisms may be absorbed from the tonsil. Referring to the toxic effects resulting from tonsillitis, he quoted many cases in the literature of sepsis and pyemia, in which the tonsil was proven the open gateway for the entrance of pyogenic organisms into the blood and tissue of the body. The relation of acute articular rheumatism and the allied diseases of endocarditis and chorea to tonsillitis, was clearly shown, as was the fact that diphtheria, scarlatina and other exanthemata may result from the absorption of microörganisms and their toxins from the diseased tonsil. The author also simply alluded to the fact that in some cases of typhoid fever in which no intestinal lesion had been found, the tonsil, by reason of its similarity in structure to Peyer's patches, may be the point of entry of the typhoid bacilli. The relation of scrofulosis and tuberculosis to diseased tonsillar tissue was explained.

The following conclusions were mentioned: (1) That the normal tonsil has a physiological function, probably protection to the organism; (2) that, being in itself often diseased, the physiological function is impaired and that, instead of being protective, it is the nidus for the growth and distribution of pathogenic organisms and their poisonous products into the system; (3) that many grave and fatal general infections have their origin in the tonsils; (4) that if the exanthemata, especially scarlatina, are of bacterial origin, the tonsil acts in part as a portal of entry; (5) that acute articular rheumatism, and the diseases often associated with it, endocarditis and chorea, in a great majority of cases are due to the action of attenuated bacteria, their toxins, or both, entering the general system through a diseased tonsil; (5) that in rare cases of typhoid fever in which no intestinal ulceration can be demonstrated, the similarity of the tonsillar tissue and Peyer's patches suggests the portal of entry to the typhoid bacillus in the tonsil; (7) that scrofulosis is often associated with diseased tonsillar tissue—mostly pharyngeal—and that the tubercle bacillus often enters the system via the tonsil; (8) that the tonsil is too little examined at necropsy and that much light might be shed on fevers of uncertain origin by the bacteriological and histological examinations.

DISCUSSION.

Dr. **Allen A. Jones.**—Dr. Ullman's valuable paper deals at length with, and calls our attention to, an important subject, that of infection by the tonsils. The study of the subject so far leads us to conclude that there are several diseases most commonly associated with initial tonsillar lesion, as, for instance, diphtheria, scarlet fever, and probably rheumatism. The association of follicular tonsillitis with typhoid fever, as seen in my case referred to by Dr. Ullman, I regard as a coincidence, although the throat affection showed not the slightest signs of yielding to treatment. Primary tuberculosis of the tonsil is a matter I would like to be further informed upon by some here present. Particular interest attaches to the question of the association of rheumatism and diseases of the tonsils. Personally, I have had my tonsils completely cut out in the hope that a subacute muscular rheumatism might thereby be prevented from recurring. I have, however, carefully studied several cases of rheumatism lately occurring in my practice, and in none of them was there any sore throat before, during, or after the rheumatic attack. The question is one that needs further careful study.

DeLancey Rochester.—The subject is very interesting. I rise to emphasise one point. Tonsils are not the portals of entry unless diseased. Diphtheria in many cases originates in the throat here more than the tonsil is involved and we have the systematic invasion from other regions than the tonsil; also a large number of cases originate in the nose and probably the disease occurs there more often than is suspected. After using antitoxin there often occurs a profuse discharge of membrane from the nose. We then know the disease existed there too. In the matter of rheumatism we are all interested but to discuss its nature is beyond the scope of the subject before us. I have one case of tuberculosis to report: a young man with cough; no evidence of diseased lung found upon examination of the chest; retained weight although not strong; hollow chest and stooping; both tonsils large; irritation in crypts probably increased by cough. I amputated both tonsils and cough subsided; within two weeks cough returned; within six months patient died of acute tuberculosis in both lungs. The tonsils probably were tuberculous. This makes me more careful about taking tonsils off with a knife. Probably other methods, as cautery and hot snare are better, leaving no surface for absorption.

Dr. E. A. Smith.—I want to ask if exposed to cold, a tonsil can take on a hyperemic condition and cause osteomyletis, just as arthritis will follow gonorrhea.

In closing the discussion, Dr. Ullman again emphasised the fact that the tonsil may be the seat of primary tuberculosis. He quoted

Schlesinger, who said that in general tuberculosis the tonsil is found tuberculous, and vice versa, that if the tonsil is tuberculous, there will often result tuberculosis elsewhere. He thoroughly agreed with Dr. Rochester that the tonsil, in order to be the portal of entry, must in itself be diseased and stated that this disease may only be the rare faction epithelium, so small as to be microscopical and that this may be the "locus minoris resistentiæ;" that there must however be a loss in the immunity of the individual, and that this accounts for the fact that many of these cases are ushered in by a cold, producing an active hyperemia of these susceptible parts. He agrees with Dr. Rochester that the nose is often affected in diphtheria and explained the susceptibility as due to the fact that there is no tonsillar tissue in the nose. Dr. Ullman answered the inquiry of Dr. Smith as to relations of osteomylitis and quoted Singer's paper on this subject, showing a relation between the two affections in the young. Manfredis's article was quoted, showing that tonsil like other lymphatic tissue had the power of attenuating bacteria.

Section on Obstetrics and Gynecology, October 23, 1900.

REPORTED BY WM. G. RING, M. D., Secretary.

The regular monthly meeting of this section was held at the Academy Rooms, Tuesday evening, October 23, 1900, at 8.30 p.m.

The meeting was called to order by the chairman, Dr. A. J. COLTON.

The minutes of the previous meeting were read and approved.

Dr. H. D. INGRAHAM read a paper on Personal experience with uterine fibroids.

Dr. C. E. CONGDON concurred with the essayist. The question whether to operate or not was debatable. When pregnancy is a present condition, and the tumor below the pelvic zone, operate; when above it, defer operation. The use of the curette is dangerous in fibroids, infection being apt to follow with disastrous results. I do not believe that there is any efficient medical treatment. Cannot say in the use of thyroids, what condition indicates their use. Perhaps Dr. Ingraham can indicate when and when not to use them.

Tait's operation is an ideal one in selected cases of fibroids, with most beautiful result, the tumors entirely disappearing, even when the size of an adult head.

Dr. Congdon then related the details of a case of supposed pregnancy of a period of two and a half months. The uterus was curetted, fetus removed. There still remained a nodule in the cavity of the uterus; this was removed with a placenta forceps and proved to be a small fibroma. He also had, ten days ago, what he supposed was a pedunculated fibroid; the fundus uteri felt depressed, cup-shaped; thought the uterus had become inverted. An abdominal section was made, a number of small fibroids of the fundus were found. A hysterectomy was done and recovery took place. Palliative treatment is not recommended except where operation is not feasible.

In closing the discussion Dr. INGRAHAM said about the use of thyroid, I would not give it to a woman who was weak or debilitated, or to one with a weak heart, otherwise I would give five grains a day, increasing the dose; it is not a reliable remedy.

Number present, 21. Meeting adjourned at 9.45.

EARLY RECOGNITION OF CANCER OF THE UTERUS.

HUMISTON, (*Jour. Amer. Med. Assn.*, Vol 35, No. 13,) says it has been his experience that the most common form of cancer of the cervix, the adenocarcinoma, is by far the most to be dreaded:

1. Because of its natural growth in expanding laterally into the parametrium.

2. Because the lymphatic vessels and glands in the parametrium are so small that they may easily be overlooked, yet may be infected.

3. Because of the indirect connection to the chain of glands over the iliac vessels.

He argues for

1. Early differentiation of malignant growths of the cervix.

2. Careful consideration of the importance of the lymphatic vessels and glands in their capacity of drains of the different portions of the uterus.

3. That abdominal section with complete removal of these special groups of lymphatics alone offers in suitable cases the chance against a recurrence of carcinoma, particularly when the cervix is affected. —*Memphis Medical Monthly.*

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

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PROFESSIONAL FEES.

DURING the last month a case has been on trial in Buffalo which required several local physicians to give their opinions as to the value of medical services. Their testimony was commented upon rather sharply by some of the local papers and, afterward, "a physician" expressed his views in a letter in the open column. If the reports of the testimony were correct, as given by the doctors, it is evident that this very practical subject will bear a little further consideration along the same lines even in a medical journal.

One point which was made rather nebulous to the jury was the question why one amount should be charged to the poor and another to the rich for the same operation. It is probably true that the circumstances of the patients sometimes are factors in determining the fee.

The fact is, the doctor has to give a large part of his time and energy for nothing, in hospitals, or study, before the rich ask for his services at all, and what they really pay for, is not alone the service rendered just then, but for their proportional part of his time which was spent in gaining adequate knowledge. It is perfectly true also that the rich make greater demands upon our time and attention, and some of them look upon the physician whom they employ as rather akin to a well-educated servant.

When such patients enter an office, they expect to be seen promptly, to be listened to patiently, no matter how long or how irrevelant may be their story, and to have special care bestowed upon them. Or, when visited at their homes, ills that are trifles to others are of importance to them, because unaccustomed to annoyances and the physician is often obliged to dance attendance and cater to peculiarities as he would not, unless paid for it.

Most physicians will probably agree as to the justice of thus varying their charge according to the circumstances of the patient. But, on the other hand, they differ not a little when it comes to another aspect of this question—namely, the different fees charged by different doctors for the same service to the same individual. Thus, nearly every county has its so-called "fee bill" which is usually approved with some ceremony at a meeting of the local association, and then disregarded except as a general plan of guidance. A few may cry out against lack of uniformity, but the real fact is, that other things being equal in a reputable medical practice, as in every other branch of business, the amount realised depends upon the amount of time and capital invested.

If one has had no early training and has barely succeeded in passing his examination after the usual three or four years' course, has purchased a dozen or twenty books and read but few of them, the professional investment of such a man is exceedingly small as compared with that of another, who after taking his academic course has graduated with honor, served one or two years in a hospital, spent several thousand dollars in books and instruments, and worked for years, often without pay, that his experience might be larger and his judgment more mature. It seems only natural that this much larger investment of time and capital should give a proportionately larger return to the second than to the first. The fresh graduate who is paid $25.00 for his first case of appendicitis, receives more in proportion than does the careful and experienced surgeon at ten times that fee.

The general impression of doctor's fees, is often suggestive of the reply given by a farmer who asked for his bill at a fashionable hotel. The smart clerk promptly told him the amount without looking at the books, whereupon the old man straightened up and said, "guess again, young feller, I've got more money in my pocket'n that." It is worth while to remember that doctors do not guess at such fees as they can hope to get, but they earn what they receive, often with no small expenditure of labor and care and anxiety for their patients.

SOME NEWSPAPER SURGERY.

DR. W. W. KEEN, of Philadelphia, has been having a hard time with certain newspapers in his city, which persisted in publishing reports of his clinic without his authority and in a most glaring inaccurate and ludicrous manner. Not only this, but the tone of the articles was distinctively offensive. Dr. Keen wrote the newspaper requesting that nothing be published concerning him or his clinic. The reply to this was the publication of another article as offensive as the first and more ludicrous if such a thing were possible. Dr. Keen then appealed to the proprietor of the newspaper and secured the relief he asked for. That is a case of honesty of purpose for which Dr. Keen will be heartily commended by every surgeon of standing in the country. Quite different was the case in Buffalo within the past two weeks when an article was published in a morning newspaper describing an operation under the newest fad in anesthesia —cocainisation of the spinal cord. This article has all the ear marks of having been either written or dictated by a medical man, and an idea of the general literary excellence and scientific accuracy may be had by reading this paragraph:

> The patient was first placed in a sitting position on the operating table. His body was inclined forward at an angle of about 45 degrees. Then the operating surgeon inserted between the articulation of the fourth and fifth vertebrae a hypodermic point 2½ inches long. The point was charged with fifteen minimums of cocaine.
>
> In the method adopted, the bare nerve or cord is reached by the use of a long hypodermic point. Then the dose of cocaine is directed immediately into the cord. The circulation in and about the cord is very sluggish and the opportunity for the absorption of the cocaine into the general circulation is very small, as there is less danger in using a large dose in the medullary canal than there would be in fusing a small dose into the general circulation.

This bears out what the JOURNAL has often said before, that a newspaper which wishes to print medical news should have an educated physician on its staff. Until newspapers adopt this plan they will continue to make odd spectacles of themselves.

"MEDICINE AS A BUSINESS."

DR. G. FRANK LYDSTON, of Chicago, is a versatile writer, and he has the happy faculty of saying things which sink deep down into the memory and stick there. He recently wrote a work on genito-urinary diseases which is quite the most satisfactory article of its kind which has come along in some time. And now he has issued a little pamphlet which, with all due respect to the vast army of genito-urinary men, amateurs and professionals, is apt to do much more good generally than all the text-books in the medical business. Text books teach a man how to be a doctor, but Dr.

Lydston's little pamphlet will teach doctors how to be men, and we all know some who need educational advantages. They can get a post-graduate course in Lydston's pamphlet and it will be cheap. This pamphlet is a noisy little publication. It does a whole lot of talking and it talks straight and hard, and it is known as "Medicine as a Business."

We can well imagine the warmth of the discussion which followed the address on which the pamphlet is based. Dr. Lydston, himself, speaks of it. Concerning the financial rewards of the profession, the writer tells of the tradesman who, while owing his family physician a goodly amount, sends his goods C. O. D., or, if an account is permitted, the bill comes booming along the first of the month followed by a collector on the 15th. This is too true; too sadly true. Look over the judgment rolls of Erie County and see the physicians' names; search in vain for the name of a judgment whose account is for medical services! The greatest fault lies at the door of the profession itself. Doctors do not send out bills often, and when they do they let them go for what they are worth and seldom if ever follow them up with a collector. In this respect there is a growing sentiment in Buffalo for a betterment of financial affairs, and a number of physicians now never mail bills at all, but merely send a collector out every month to present them. An excellent illustration of one class of people spoken of by Dr. Lydston—the "dead-beat" fraternity—lives in Buffalo. He has been ill six times in two years and has had eight different physicians, not one of whom has received a cent for his services. And he gets the best, too. The "free" patient comes in for his share of lashing at Dr. Lydston's hands, as does the grasping hospital and the dispensary. In Buffalo, this feature obtains to a large extent. One young woman who needed an operation made arrangements with a surgeon to perform it for $50. She had the money and the day was fixed. In the meantime she secured a "poor order," went to a hospital and was operated upon. It did not cost her a cent for anything. The grasping after business tends to make dispensaries and hospitals overlook investigation and this is one thing which Dr. Lydston complains of bitterly. It would do a world of good to distribute these pamphlets broadcast. It would tend to elevate the medical profession higher than all the codes of ethics in the minds of any of our ethical societies or practitioners. Send to the *Riverton Press* and get a copy of the pamphlet, follow its advice and a great change will come over your fortunes and your friends! You'll have more of both.

Now that a general election has been held and the Republican party has been retained in power, it is time something were done for the medical department of the Army. As it is now constituted it is wholly inadequate. There are too few surgeons for the number of men in the regular and volunteer regiments and, although Gen. Sternberg is doing his very best to keep the army well supplied with medical attendance, he is hampered by restrictive laws and arbitrary rulings by the comptroller of the treasury.

The employment of surgeons by contract is at best a make-shift and although they have done remarkably good service and have been simply invaluable, there is no inducement for them to go into foreign service, or remain there after the expiration of their contracts. The contract surgeons should be commissioned and given all the rights and privileges of other officers. The welfare of the army is in the hands of the administration, and the army bill should be pushed through early in the coming session.

THE Texas *Medical News*, published at Austin, devotes considerable space in its October edition to an account of the hurricane that enveloped Galveston, September 8, 1900, with such terrible destruction of life and property. The article is graphically written and copiously illustrated with half-tone engravings, which depict the awful ravages of a storm that swept the Island City with the besom of destruction. A sympathising world has offered its assistance to a suffering and sorrowing people, already struggling manfully to repair the almost immeasurable damage done by wind and water in a few hours.

THE Michigan health administration is proverbially among the best. The high regard in which it is held by well-informed people not only in the state of Michigan but in other states and countries, is found in the preface to the first bulletin of the American Congress of Tuberculosis held in New York wherein the secretary of that organisation, who is also the president of the Medico-legal Association, says relative to the restriction of tuberculosis: "that it is a proper subject for legislation, for the use of all proper means to prevent or arrest its spread or increase, is now very generally conceded and the Michigan legislation and the statistics from that state show that similar legislation in other states and still more radical measures might be of great public good, in arresting the alarming spread of this scourge of the human race."

PERSONAL.

Dr. E. L. Shurly, of Detroit, Mich., visited Buffalo, Monday, November 19, 1900, and participated in the proceedings of the Buffalo Academy of Medicine (laryngological section) in which there was a discussion on tuberculosis. Previous to the meeting Dr. Frank Whitehill Hinkel, chairman of the section, gave a dinner at the University Club, where Dr. Shurly, as the guest of honor, met a number of his old friends and some new ones as well. Among the guests were: Drs. Henry R. Hopkins, Charles G. Stockton, D. W. Harrington, Herman Mynter, F. W. Abbott, DeLancey Rochester, John H. Pryor, H. R. Gaylord and William Warren Potter.

Dr. H. A. Foster, of St. John's Place, accompanied by Mrs. Foster, has gone to Santa Paula, Cal., to spend the winter. Dr. Foster has recovered from a recent illness and avails himself of the mellow climate of Southern California to establish permanent recovery.

Dr. Lucien Howe, of Buffalo, was elected president of the Medical Association of Central New York during its recent annual meeting held at Rochester. Dr. Howe will preside at the next meeting, to be held in this city on the last Tuesday of September, 1901.

Dr. Martin J. Downey, of Buffalo, U. of B., '99, for more than a year connected with the staffs of the Sisters and Emergency Hospitals, has left the latter institution and will establish an office in Seneca Street about December 1st.

Dr. W. H. Heath and Dr. Nelson W. Wilson, of Buffalo, have removed their offices from No. 267 Franklin Street to No. 453 Niagara Street, corner of Hudson. Telephone Tupper 507. Consultation hours: 2-4, and after 7 p.m.

Dr. N. G. Russell, of Buffalo, lately appointed district physician by Health Commissioner Wende, has established his office at 251 Jefferson Street, corner of Clinton. Hours: 12 to 1 p.m. Telephone, Howard 364.

Dr. William B. May, of Buffalo, has removed from 658 Clinton Street to 251 Jefferson Street, corner of Clinton. Hours: 2-3 and 7-8 p.m. Telephone, Howard 364.

Dr. Julien A. Riester, U. of B., '99, has finished his term as resident physician at the Buffalo General Hospital and will make his home in Buffalo.

Dr. A. Walter Suiter, of Herkimer, N.Y., recently paid a visit to Buffalo as the guest of Dr. Ernest Wende and Dr. William Warren Potter.

Dr. J. M. O'Neill, of Buffalo, has removed from 852 Seneca Street to 536 Swan Street. Hours: 1-3 and 7-8 p.m. Telephone, Howard 212.

Dr. W. J. Deane, of Buffalo, has removed from 134 E. Ferry to 926 W. Ferry Street. Hours: 8-10 a.m.; 1-3 and 7-9 p.m.

Dr. Alton L. Smiley, of Buffalo, has been appointed a medical interne at the Buffalo State Hospital.

Dr. William Stanton, U. of B. '89, of Varysburg, N.Y., has removed to Webster, N.Y.

Dr. A. L. Benedict, of Buffalo, announces the removal of his office from 174 Franklin Street to 995 Main Street. Office hours and limitation of practice to diseases of the digestive organs, will remain as before. Telephone, Tupper 670.

OBITUARY NOTES.

Dr. William Webb Browning, of Brooklyn, died at his home October 3, 1900, of apoplexy, aged 48 years. Dr. Browning was first a lawyer and then a doctor, graduating in medicine at Bellevue in 1884. He was professor of anatomy and clinical orthopedics at Long Island College Hospital, at the time of his death, and he had been a writer of considerable renown.

Dr. Edward Robinson Squibb, of Brooklyn, died at his home October 29, 1900, of cardiac disease, aged 81 years. Dr. Squibb was early in his medical career in the naval service, finally attaining the rank of surgeon. He resigned early in the 60's, and established himself as a manufacturing chemist in Brooklyn. He did much to improve this important branch of chemical science, and the products of his laboratory were everywhere noted for purity and reliability.

Some years ago Dr. Squibb retired from active participation in the business, and it has since been conducted by his sons, Dr. Edward H. Squibb and Mr. C. H. Squibb.

Dr. Laurence Turnbull, of Philadelphia, died in that city October 24, 1900, aged 79 years. He was noted as an otologist and was the first in this country to trephine the mastoid for ear disease.

Dr. Horace Tracy Hanks, of New York, died at his home, No. 766 Madison Avenue, of nephritis, November 18, 1900, after an illness of one week, aged 63 years. He graduated at Albany Medical College in 1861, served in the Union Army as assistant surgeon with the Thirtieth New York Volunteers, was gynecologist at the Demilt Dispensary from 1872 to 1882; assistant surgeon at the Woman's Hospital from 1875 to 1879, and surgeon since the latter year. Since 1885 he had been professor of diseases of women in the New York Post-Graduate Medical School and Hospital.

Dr. Henry Drury Noyes, of New York, died of pneumonia at Mount Washington, Mass, November 12, 1900, aged 68 years. He was famous as a teacher and author and was among the distinguished ophthalmologists of the period. He was active in his work as practitioner, teacher and writer until his last illness.

Dr. Wallace A. Sibley, of Rochester, N.Y., a well-known physician, died at his home, No. 57 Lake Avenue, October 28, 1900, at the age of 54 years. Organic heart disease, with which he had been afflicted for years, was the attributed cause of his death.

SOCIETY MEETINGS.

The American Public Health Association at its recent meeting at Indianapolis voted to hold its next annual meeting at Buffalo. This was brought about largely through the influence of Drs. Ernest Wende and W. G. Bissell, who represented the Buffalo health department as delegates to the meeting.

The Medical Society of the State of New York will hold its ninety-fifth annual meeting at Albany, January 29, 30 and 31, 1901, under the presidency of Dr. A. M. Phelps, of 62 E. Thirty-fourth street, New York City. The business committee consists of Dr. Frank Van Fleet, 63 E. Seventy-ninth street, New York City, chairman; Dr. J. B. Ransom, Dannemora and Dr. F. H. Parker, of Auburn. Those who desire to read papers are requested to communicate promptly with one of the members of the business committee or the president on the subject.

As there will be a great many papers offered, and the time necessarily limited, it is suggested that papers be condensed as much as possible in reading, as they can be published more fully in the transactions. Arrangements for reduced fares can be made when purchasing railroad tickets.

THE Buffalo Academy of Medicine held meetings during the month of November, 1900, as follows:

Section on Surgery.—Monday evening, November 5th. Program: Differential diagnosis in diseases of the gall bladder, George Emerson Brewer, Surgeon Roosevelt Hospital, New York City; discussion opened by Roswell Park.

Section on Medicine.—Tuesday evening, November 13th. Program: A review of the modern surgical and medical treatment of epilepsy, L. Pierce Clark, physician Craig Colony for Epileptics, Sonyea, N. Y.; Paresis and cerebral syphilis, Arthur W. Hurd; discussion by Roswell Park and James N. Putnam. A case of asthenic bulbular paralysis, William C. Krauss. Report of a case of pseudo-hypertrophic muscular paralysis, Fridolin M. Thoma; discussion by Dewitt H. Sherman.

Section on Ophthalmology, Otology, Rhinology and Laryngology.—Monday evening, November 19th. Program: Exhibition of a case of total removal of thyroid gland, G. F. Cott. Discussion: The relation of tuberculosis of the larynx to pulmonary tuberculosis; discussion opened by De Lancey Rochester, followed by E. L. Shurly, of Detroit, Mich., and John H. Pryor.

Section on Pathology.—Tuesday evening, November 20th. Program: Pathology of stone in bladder, W. D. Green. Pathology of arthritis deformans, and exhibition of cases, Herman Mynter.

Section on Obstetrics.—Tuesday evening, November 27th. Subject to be announced, C. C. Frederick.

THE Niagara Falls Academy of Medicine held its regular monthly meeting at the office of Dr. W. H. Potter, 17 Sugar Street, Echota, on Monday evening, November 12, 1900, at 8.45 p.m. Papers were read by Dr. A. L. Chapin and Dr. O. E. McCarty.

THE St. Louis Academy of Medical and Surgical Sciences elected the following officers for 1901, at its last regular meeting: President, Emory Lamphear; senior vice-president, Carl Pesold; junior vice-president, H. S. P. Lure; secretary, O. L. Suggett; treasurer, G. M. Phillips; orator, Wm. Porter; librarian, H. G. Nicks.

THE Southern Surgical and Gynecological Association held another of its famous annual meetings at Atlanta, Ga., November 13, 14 and 15, 1900. The association was presided over by Dr. A. M. Cartledge, of Louisville, Ky., who made an ideal president in appearance, manner and method, and his presidential address was replete in important surgical truths faultlessly delivered.

In attendance were representative men from all sections of the country, many of whom read papers of instructive interest which were discussed, for the most part, with incisive clearness and detail.

The leading members of the medical profession of Atlanta provided elaborate and delightful entertainments for the visitors, among which were a smoker on Tuesday evening and a reception on Wednesday evening, both given at the Kimball House. Besides these there were private dinners and luncheons given by Drs. Westmoreland, Noble, McRae, Holmes, Elkin and Cooper.

Dr. M. H. Simmons, of Charleston, S. C., was elected president in succession, and the next meeting will be held at Richmond, Va., beginning on the second Tuesday of November, 1901, at which Dr. George Ben Johnston will serve as chairman of the committee of arrangements.

Dr. W. E. B. Davis, of Birmingham, Ala., who has been secretary of the association from its foundation, voluntarily retired from the position and his mantle falls upon Dr. W. D. Haggard, Jr., of Nashville, one of the active younger members of the association. In surrendering his office Dr. Davis leaves in the hands of his successor a splendidly organised body of professional workers, that owes much to his faithfulness and great executive capability. The medical profession of the South owes more to Dr. Davis than it can repay in many a year, no matter how highly it may choose to honor him.

COLLEGE AND HOSPITAL NOTES.

THE Buffalo General Hospital has adopted plans for an addition and were filed recently in the Bureau of Buildings. The estimated cost is $35,000. The additional building will be 38 feet wide and 96 feet long. It will be an extension of the present wing and will correspond in design to the new wing recently built. The same kind of materials, yellow brick and terra cotta, will be used. The addition will front on Elm Street. Architect George Cary prepared the plans and to Jared H. Tilden has been awarded the contract for building.

A NEW Emergency Hospital will be built on the corner of Eagle and Pine Streets, for the construction of which a contract has been awarded to John Lannen. Green and Wicks are the architects for the new building and the plans call for a three-story brick building with basement. The basement will be used for clinical purposes, the first floor will contain the primary wards and the second floor the secondary wards. The surgeons and attendants will be housed on the third floor. The Emergency Hospital is the accident branch of the Buffalo Hospital of the Sisters of Charity.

AT THE New York Skin and Cancer Hospital, Second Avenue, cor. 19th Street, the board of governors announces that Dr. L. Duncan Bulkley is giving a series of clinical lectures on diseases of the skin in the out-patient hall of the hospital, on Wednesday afternoons, that commenced November 7, 1900, at 4.15 o'clock. The course is free to the medical profession.

THE College of Physicians and Surgeons, of Chicago, has received a gift of $50,000 from two prominent physicians of that city. Dr. William E. Quine, dean of the school, gives $25,000 to endow the college library, and Dr. D. A. K. Steele gives $25,000 to endow the pathological laboratory.

These princely gifts are conditional upon the purchase of the trustees of the University of Illinois, of which the College of Physicians and Surgeons is a part, of the old west division high school building. All the negotiations for this purchase have been completed, however, and the transaction wants only the approval of the city council for its consummation. When the deeds have been signed the university trustees will fit up rooms for the library and the laboratory in the building, and the two physicians will at once turn over to them the endowment securities.

Book Reviews.

A TREATISE ON DISEASES OF THE NOSE AND THROAT. By ERNEST L. SHURLY, M. D., Vice-president and Professor of Laryngology and Clinical Medicine, Detroit College of Medicine; Laryngologist and late Chief of Staff, Harper Hospital; Consulting Laryngologist, St. Mary's Hospital, etc. Octavo, pp. xvii.—744. Illustrated. New York: D. Appleton & Company. 1900.

Numerous text-books on diseases of the nose and throat have appeared in the past few years purporting to be written for, the student and medical practitioner unacquainted with the manifestations of disease in the upper air passages and unfamiliar with the technique necessary for their observation. None of them has been satisfactory when measured by its purpose. Either too much knowledge on the part of the reader is assumed, or details of local surgical treatment that none but an expert is interested in or able to follow, are extended, while the broader clinical and therapeutic measures, that are of most importance and interest to the general practitioner, receive limited attention. This is, perhaps, inevitable when the point of view of the writer is habitually that of the special surgeon. It is with pleasure, therefore, that the reviewer commends Dr. Shurly's work to the student for whom it has been prepared; at the same time the most specialised of laryngologists will find broad vistas and interesting sidelights upon many points perhaps heretofore too narrowly considered.

The author is especially fitted to write such a work as he has presented to the profession. An accomplished and experienced laryngologist, he has not entirely severed himself from general practice; and he brings to the consideration of a relatively narrow field of medicine the broad views and wide general clinical experience that are constantly shown in his text-book, directly and by allusion. To one characteristic of this book it may not be amiss to call attention in these times of much false "patriotism" and "Americanism." While the author depends often, of necessity, upon reports and conclusions of foreign pathologists and experimenters, especially the Germans, he never fails to make use where possible of the original work of his fellow-countrymen, and one closes the book with a feeling almost of surprise at the fund of pathological investigations and clinical reports by Americans to which he refers.

The arrangement of subjects upon the basis of the diseased processes, rather than the anatomical relations, aids the student to a conception of the unity of the type of disease wherever manifested and prevents useless repetition. Throughout the work the clearness with which both local and general medicinal treatment are described, indicates the author's familiarity with the local and general clinical aspects of the diseases under consideration. His theories of therapeutics are clear and decided, yet practical in their application, and free from an exaggerated estimate of the value of drugs.

The first chapter of the book, devoted to the anatomy and physiology of the upper-air passages, is clear and fresh in its treatment. The illustrations are largely original, well executed, and explanatory of the features they are intended to portray. In considering the action of the soft palate, by a strange oversight no mention is made of its important function of dilating the Eustachean tube and ventilating the middle-ear. The author's lapse is the more to be regretted since, for an appreciation of the deleterious effects upon the middle-ear of lymphoid hypertrophies in the vault of the pharynx, a clear conception of this mechanism is necessary.

That portion of the work which concludes with the eleventh chapter is of particular interest to the general practitioner. In it are included the diseases of the upper-air passages which are not essentially surgical. The excellent discussion of the etiology of acute rhinitis illustrates the thoroughness and breadth with which the general relations of these local lesions are considered. If we accept the etiological relation of the bacillus of Pfeiffer to influenza, it renders more probable the microbic origin of acute rhinitis than the author implies. His trustworthy conservatism is shown, however, by his unwillingness to assume etiological factors in this and other diseases that have not satisfactory clinical as well as theoretical probability. The chapter on diphtheria,—a theme that may be called almost hackneyed,—is notable for its beautiful consideration of the pathology of the disease and for the succinctness, clearness of statement, and wisdom, of its suggestions and conclusions. It is unnecessary to add that treatment has full consideration without undue detail of obsolete methods.

In considering acute follicular tonsilitis, Dr. Shurly writes, page 139, "while it can not be denied that rheumatism is probably an etiologic factor in some instances, yet its importance in this direction has undoubtedly been very much overestimated. Whether rheumatism be considered one of the infectious diseases (due to a microörganism) or simply a hemic disease depending upon irregularities of metabolism, it has only an incidental relation, from a clinical point of view, with acute follicular tonsilitis." Again, page 143, he says: "many writers emphasise the rheumatic and gouty diathesis, as strong predisposing causes of not only this, but of the other acute and subacute diseases of the throat. It is believed that peritonsilitis has been more especially connected with the rheumatic diathesis than with any other. . . . The writer does not understand how it can be conceded on general principles that any special connection exists between the rheumatic diathesis and acute peritonsilar inflammation (quinsy) any more than between the rheumatic diathesis and other acute diseases, such as pneumonia, etc. . . Concerning the point of direct alternation or metastasis, so to speak, between rheumatic affections and acute tonsilar and other acute throat affections, all that can be said is that events of that kind are too few to furnish any basis for correct generalisation. The writer in over twenty-five years of practice, has seen only one case of acute articular rheumatism directly connected with acute peritonsilitis." Weight must be given to the author's clinical observations, broader than those of most laryngologists, but the reports of F. A. Packard, and others, of cases of endocarditis, arthritis, pleurisy, etc., following streptococcus infection of the tonsil are too detailed and suggestive to be dismissed without further investigation. This interesting change in point of view is to be noted, that while the author and the authorities he quotes have regarded the tonsilar as secondary to the rheumatic affection, the observations of Packard and others signify the dependence of the rheumatic manifestations upon microbic infection through the tonsils. No hint of this relation is found in Dr. Shurly's book.

Retropharyngeal abscess, which though rare, may yet have fatal occurrence in the practice of any family physician, receives thorough consideration. No mention is made of possible danger in using the mouth-gag in examining, or treating these cases. There is some evidence to the effect that sudden stoppage of respiration and heart may follow forcible depression of the tongue, where the abscess is located low in the pharynx.

The neuroses have full and broad treatment. Particularly may be mentioned the excellent summary of our knowledge of hay-fever, imaginary foreign-body in the pharynx, and of hysterical aphonia, each of which is frequently met with in general practice. The author speaks with special authority upon tuberculosis of the upper air-passages. The breadth and moderation of his views of the pathology of the disease will commend them to his readers. His suggestions for treatment are based on large experience and are free from undue optimism or insistence upon any special, local, or general methods of treatment.

A consideration of catarrhal inflammation of the nose, pharynx and larynx, and of diseases of the lymphoid structures of the pharynx, concludes what may be considered the medical portion of the work as distinguished from the more strictly technical and surgical part.

In the treatment of hypertrophic rhinitis no mention is made of the ingenious electrode devised by Vulpins for the removal of posterior hypertrophies of the inferior turbinal. It is so simple in its application and so satisfactory in its results that it should be more widely known and used than it appears to be. While the details of the technique of cauterisation of the nasal mucous membrane are fully given, the implication seems plain that cauterisation should not be used except where other surgical methods are contra-indicated. As to the etiology of atrophic rhinitis and ozena, it seems that scarcely enough consideration is given by the author to Grünwald's conclusions in regard to the secondary relation of this disease to suppuration of the accessory sinuses. Grünwald presents such careful study,—bibliographical, anatomical and clinical,—of these cases, and is so logical in his methods, that he compels a careful consideration of them from the point of view that he advocates. The treatment of this intractable disease is given with great fulness, but with a lack of definiteness inevitable to the present state of our knowledge.

With the author's advice that "both tonsils should not be cut at the same time" and that "only the projecting portion" should be removed the reviewer must take issue. The one procedure compels the suffering twice of post-operative sore throat,—the most painful feature of the operation; the other will result frequently in failure to remove diseased and irritating tissue. As a preventive of hemorrhage after tonsilotomy, the author does not mention the value of rest in the recumbent position until the next day. Dr. Shurly wisely avoids dogmatism about the etiology of "adenoids," but he might have laid more tress upon recurring "earache" as a symptom of the disease in childhood. The family physician still needs to be educated to appreciate that this symptom calls for prompt surgical interference, if possibly serious aural disease is to be avoided later in life. The reviewer cannot agree that "there is little danger in the administration of chloroform" in the adenoid operation. Statistics point too plainly to an excessive death-rate in this operation under chloroform. Dr. Shurly's breadth of view and conservatism in discussing the etiology of chronic laryngeal catarrh, are in contrast to the dogmatism with which narrow views of its local origin frequently have been promulgated in text-books of diseases of the upper air-tract.

The author asserts, page 498, that "nasal polypi, . . lead to chronic sinusitis of the ethmoid cells, and frontal sinus." In regard to the etiology of chronic diseases of the ethmoid cells he says, page 499, they "arise in a majority of cases from long-continued rhinitis or polypi." He does not allude to the opinion which Grünwald so ably supports in his work on Nasal Suppuration,—that inflammation of the accessory sinuses precedes and causes the polypi. Dr. Shurly, indeed, says, page 500: "Grünwald and others seem to think that nearly all cases of necrosing ethmoiditis are connected with the presence of polypi." This somewhat ambiguous statement hardly can be said to represent clearly Grünwald's position. But the whole subject of sinusitis still presents vexed questions, and the author with his usual conservatism says on the same page, "the causal relation of nasal neoplasms is possibly overrated." Perforation of the nasal wall of the antrum for diagnostic or therapeutic purposes is not usually, as stated by the author, "a very painful and often difficult procedure," whereas puncture of the nasal wall through the middle meatus with Krause's curved trochar may, as in a case known to the reviewer, penetrate the ocular orbit. In the treatment of acute sinusitis there is no mention made of the value of a free use of a spray of suprarenal extract to relieve engorgement of the mucous membrane and favor drainage. The surgical treatment of chronic sinusitis and empyema has concise, yet clear consideration. An excellent anatomical suggestion is made to the effect that "uncapping" the middle turbinate does not usually open the anterior ethmoidal cells, and that the chief value of this operation is to clear the field for access to them later. The important subject of the surgical treatment of empyema of the frontal sinus is dismissed with undue brevity. The method described by the author of opening this sinus from the inside of the nasal cavity must be condemned. The anatomical relations of the sinus, infundibulum, and cranial cavity, vary so greatly that this method of operating is much more hazardous than the external operation. Nor where granulations, necrosis, or polyps, are present in the sinus can the internal method be so thorough and satisfactory in its results.

The general practitioner will do well to heed the author's warning in cases of foreign body in the nasal passages, not to be too vigorous in his attempts at removal, lest, as in the case of a foreign body in the auditory canal, the "cure be worse than the disease." The cuts illustrative of intubation of the larynx are instructive, and the entire chapter on operations upon the pharynx and larynx repays careful reading.

Dr. Shurly's work is recommended heartily to students and general practitioners of medicine. Surgeons familiar with the field it covers will recognise its merits without assistance. Such good wine needs no bush. Praise is merited by the publishers for the handsome book they have presented to the profession; the binding, paper, type, and the execution of the illustrations are worthy of the high character of its contents.—F. W. H.

THE AMERICAN ILLUSTRATED MEDICAL DICTIONARY. A New and Complete Dictionary of the Terms Used in Medicine, Surgery, Dentistry, Pharmacy, Chemistry and the Kindred Branches. With their Pronunciation, Derivation, and Definition. Including much Collateral Information of an Encyclopedic Character. By W A. NEWMAN DORLAND, A. M , M. D., Assistant Obstetrician to the University of Pennsylvania Hospital; Editor of the American Pocket Medical Dictionary. With numerous illustrations and 24 colored plates. Philadelphia and London: W. B. Saunders & Co. 1900. [Price, $4 50, plain; $5.00, index]

One of the beauties of this book is that it is easy and comfortable to handle with its flexible covers; easy to read with its remarkably clear type and its good quality of paper. For these benefits we must extend thanks to the publishers, W. B. Saunders & Co. They have put forth a work which is up to the Saunders standard, which appears always to be to give the best in its most convenient and usable form. One would not expect Saunders to hand out a hard-shell dictionary; neither would one expect to see come from their presses a book, say on practical analysis of urine—a sort of work-table guide— in pretty, soft covers, with uncut or deckel edges. There is always a fitness of things about Saunders's publications which inspire confidence.

As to Dr. Dorland's share in the work of producing this dictionary too much cannot be said in way of praise and congratulation. A careful and serious search,—comparative, really,—of the work fails to reveal anything within reason, which has been left undone in the way of producing a perfect dictionary. All the ordinary terms used in medicine, surgery, dentistry, pharmacy, chemistry and the kindred branches, with pronunciation, derivation and definition are given, and in a most assimilable form. In connection with all this is much information of an encyclopedic character, although there is not by any means any effort shown to masquerade the book as an encyclopedia. It is just a word book, convenient and useful and one who uses it as a guide and sets it up as a standard cannot go astray in his work. There is much matter which appears in tabular form, including anatomical and clinical material, tests, stains and staining methods, treatment, diseases, and the like. One of the distinct features of Dr. Dorland's work is the careful attention which has been devoted to pronunciation and derivation. He has used a system for expressing sounds which is so simple and yet so accurate that one instinctively wonders how in the world any medical man can persist in saying *ab*-domen and par-*e*-sis with such a book in easy reach. The book is splendidly illustrated,—not for the sake of using pretty pictures, but to aid in a better understanding of the text. Amputations are illustrated perfectly by outline figures, and under arteries, nerves and veins are sketches in appropriate and distinctive colors and descriptive tables. The various microörganisms of disease are shown in color; bandaging is illustrated and blood affections are most beautifully shown in exquisite plate work. Fractures, muscles and sutures and ligaments are shown in black and white, and embryology is made clearer by the use of colored plates.

Altogether Dr. Dorland's dictionary is just such a handy, companionable book as a doctor could use with great benefit to himself individually and to the profession in general, if he kept it within easy reach on his table.—N. W. W.

A MANUAL OF OPERATIVE SURGERY. By LEWIS A. STIMSON, B. A., M. D., Professor of Surgery in Cornell University Medical College. New (4th) and thoroughly revised edition. In one royal 12mo volume of 581 pages with 293 illustrations. Just ready. Philadelphia and New York: Lea Brothers & Co. 1900. [Price, cloth, $3.00 net.]

The fourth edition of this well known little work has been brought fully up to date. The author has enlarged the section containing conclusions drawn from personal experience and has omitted portions of the text and a number of illustrations, which in his judgment have lost their usefulness. The book covers the entire field of operative surgery, even including sections on the eye, ear and female generative organs, and yet it is of convenient size, owing to the concise and compact style of description. Part I. is devoted to the accessories of an operation, the preparation of patient, instruments and sutures, and we mark with pleasure that anesthesia by nitrous oxide gas and ether is given favorable mention. In the chapter on excisions of bones and joints the author gives his own operation for old unreduced Potts' fracture.

The chief value of the book lies in the practical points preceding the description of each operation, or series of operations, the surgical anatomy of the parts, the originator of the operation with bibliographical reference, the indications for choice of operation and hints as to technique, which experience only can afford. Altogether we can commend author and publisher on the result obtained.—P. LEB.

TAYLOR ON GENITO-URINARY AND VENEREAL DISEASES AND SYPHILIS. The Pathology and Treatment of Genito-urinary and Venereal Diseases and Syphilis. By ROBERT W. TAYLOR, A. M., M. D., Clinical Professor of Venereal Diseases in the College of Physicians and Surgeons, New York. New (2d) edition. Octavo volume of 720 pages, with 135 engravings and 27 full-page plates in colors and monotone. Philadelphia and New York: Lea Brothers & Co. 1900. [Cloth, $5.00 net; leather, $6.00.]

The first edition of this work met with such general favor that a second volume became a necessity by reason of the advances made in genito-urinary work. This has given Dr. Taylor a chance to make a complete work on the one specialty in medicine which every man who has M. D. at the end of his name believes himself thoroughly familiar with, and about which so few have more than a mere smattering knowledge. Of course, Dr. Taylor advances his own views in connection with the treatment of acute diseases. He gives the procedures which have been most successful in his own practice; yet, for all that, he does not slight other well-recognised treatments, and while objecting to some he gives reasons and the reader is thus enabled to take his choice intelligently. Be they good or insufficient makes no difference; that is all a matter of personal experience anyway; the fact remains that the stamp of broad-minded honesty is given to Dr. Taylor's work by his treatment of these subjects, which is a decided relief when one considers how frequently authors are prone to give their own methods and condemn others, apparently on general principles.

A shining virtue of the book is that it is not over-burdened with morbidities, symptoms and conditions which are constant in well recognised abnormal states. These are not slighted, but one is not ding-donged in each succeeding chapter by a repetition of thinly disguised statements. Neither is there any disposition shown to parade rare and anomalous conditions and malformations found in unusual diseases. The work is in no sense a historical sketch and Dr. Taylor very wisely steers clear of dragging into a text-book any part of the genito-urinary curiosity shop. Out-of-date operations and treatments are ignored for the same reason. The work has been practically rewritten and much is added which is of decided benefit to it as a text-book. That portion dealing with genito-urinary operations is remarkable for its clearness, and a really excellent section is that devoted to the preparation of the patient and the instruments for operation, because it is practical, blunt, to the point and is utterly lacking in rhetorical prettiness: it is incisive. Dr. Taylor does not say, "it would be well to do this and that," he says, "do thus and so" and one feels that he means what he says and knows he is right when he says it.

The general arrangement, too, of the book is to be commended. There is nothing suggestive of indecision about it, no wading about, no splashing, no fancy frills, but it starts off and goes through the list of genito-urinary subjects in a straight line. Regarding gonorrhea, Dr. Taylor has fixed ideas and he puts them on paper with all the confidence of a man who believes he is right. Well, possibly he is, but he comes dangerously near the brink of fanaticism when he condemns, broadly and unreservedly, the irrigation method of Janet as a general proposition, under the sub-heading of "Fads in the Treatment of Gonorrhea." In a measure, he is right for he speaks harshly of the too heroic treatment of gonorrhea in the acute stage by these methods. It is easy to see that he is aiming at the general practising physician who, armed with a Valentine apparatus and a tin basin, sets himself up as a scientific foe to that unfortunate and painful reminder of a careless indiscretion. He calls it the "rapid transit" treatment, and calls attention to the fact that it is not generally a curative measure because with the cessation of the thick discharge the patient is permitted to depart "cured" while he is still afflicted with urinary evidences of urethral trouble. As a general proposition, this may be true enough when applied to the practising physician, but in the hands of one who has made gonorrhea a study, there is no doubt that the Janet method shortens the course of the disease infection, and then an experienced man orders the astringent treatment which Dr. Taylor outlines in his routine and carries the sorely distressed patient on to a complete and permanent recovery. The book is excellently illustrated and—charm of charms!—it is a volume in which there are no wood cuts of antiquated instruments. It is not a picture gallery of the Plebian ancestry of genito-urinary surgery. It is all up-to-date from cover to cover and one reason for its good mechanical construction is that Lea Brothers & Company are the publishers.—N. W. W.

MEDICAL DISEASES OF INFANCY AND CHILDHOOD. By DAWSON WILLIAMS, M D., Physician to the East London Hospital for Children. New (2d) edition. Specially revised for America by F. S Churchill, A. B., M. D., Instructor in Diseases of Children, Rush Medical College. Octavo, pp. 538, 52 illustrations and 2 colored plates Philadelphia and New York: Lea Brothers & Co. 1900. [Cloth, $3.50 net.]

When the first edition of this book appeared two years ago it was not one likely to appeal greatly to the American student of pediatrics, for, in this branch of medicine at least, we do things better here than in Great Britain. The second edition has, however, undergone a thorough revision at the hands of the American editor with the result of making it an interesting, valuable and up-to-date contribution to the works on diseases of children.

Extensive additions have been made throughout the work. The chapter on infant feeding, which as it appeared in the older edition, was of but little value, has been thoroughly modernised and Americanised. All through the volume the careful hand of the editor in supplementing the work of the author is evident, and this without any abbreviation or alteration of the original text. The editor's contributions are of great value, too, and in many places necessary to make the book what it now is, a safe guide in pediatric practice. Many illustrations have been added, among them two colored plates, one of the latter, showing the varieties of blood corpuscles, being taken from Park's surgery.

The style of the English author is clear, his description is accurate, his experience wide. The subject of treatment is well handled, being rational and modern. The prescriptions given have been confined to the U. S. Pharmacopeia.

The publishers present a far more attractive volume than the old one, the duodecimo being changed to an octavo, and the type and paper both made pleasanter to the eye.—M. J. F.

CLINICAL EXAMINATION OF THE URINE AND URINARY DIAGNOSIS. A Clinical Guide for the Use of Practitioners and Students of Medicine and Surgery. By J. BERGEN OGDEN, M. D., Instructor in Chemistry, Harvard University Medical School; Assistant in Clinical Pathology, Boston City Hospital, etc. Octavo, pp. 416. Illustrated. Philadelphia: W. B. Saunders & Co. 1900. [Price, $3.00 net.]

The author's purpose in putting forth another work on the urine is to present in as concise a manner as possible the chemistry of the urine and its relation to physiologic processes; the most approved working methods, both qualitative and quantitative; the diagnosis of diseases and disturbances of the kidneys and urinary passages. It is saying very little, when it is said that the author has succeeded admirably and has given the profession an exposition of the subject, second to none in the English language. The work naturally falls into two parts. In part I. chemic and microscopic methods are described in detail, and numerous illustrations, many of which are original have been introduced, thus enabling the student and practitioner who has not had special training in urinary analysis to obtain accurate results. The normal and abnormal constituents of the urine are plainly set forth, and the causes given which lead to the formation of the various abnormal constituents. The chapter on urea is a very interesting and typical one; the author after giving the chemical properties of urea, follows up with the various tests for its detection, its quantity in health and disease, whether increased or diminished, and the causes leading up to its variableness. The other constituents are treated in the same thorough-going manner.

In part II. special attention has been paid to diagnosis, which includes our present knowledge of the character of the urine, the diagnosis and differential diagnosis of disturbances and diseases of the kidneys and urinary passages, whether they be local or general, medical or surgical, a brief enumeration of the prominent clinical symptoms of each disease, and, finally, the peculiarities of the urine in certain general diseases of the body.

Appendix *A*, which follows, gives the author's method of recording urinary examinations and a modified tabular arrangement of Heller's tests. The order of applying tests is then considered, and also the method of making diagnoses of diseases of the kidneys from the urine. These directions are very important, especially to the large body of physicians who have not worked sufficiently in the chemico-urinary laboratories, and add greatly to the usefulness and practicability of the volume.

In appendix *B*, is given a list of the reagents and apparatus necessary for the qualitative and quantitative analysis of the urine.

The illustrations and colored plates are handsomely executed and are profusely scattered throughout the book. The binding is in good taste, and the volume is a credit both to author and publisher.

W. C. K.

PERFECT EYES. A Complete and Comprehensive Treatise on the Organ of Vision. Duodecimo, pp. 71. Illustrated. Sixth edition. New York: Benjamin F. Stephens, Publisher. 1900.

This peculiar work was probably intended for the laity. There are three pages of extracts from poems, containing some reference to the eye; following this the anatomy of the eye is briefly given, then follows a hodge-podge of cuts of astigmatic tests, curiosities of vision, mixed up with colored illustrations of the eye muscles, blood supply, and the like. Such an arrangement is entirely out of place and strikes one as absurd. The most advanced ophthalmologist will be pleased to learn that cataract is curable by massage, also strabismus, photophobia, amblyopia and choroiditis. All of which sounds like the advance sheets of an osteopathic manual. Beginning with the seventh chapter the book is interesting and well written, although too much stress is occasionally laid upon the value of massage. The author's warning against needless muscle-cutting and the optician are well expressed and worthy of praise. It is unfortunate with the mass of material that it has not been better arranged. The book is daintily gotten up,—the paper good and the cuts exceptionally good. There should be a steady demand for such a work and we hope to see a revised edition.—R. H. S.

BRAIN IN RELATION TO MIND. By J. SANDERSON CHRISTISON, M. D., Author of "Crime and Criminals," etc. Duodecimo, pp. 142. Second edition. Chicago: The Meng Publishing Co. 1900. [Price, $1.25.]

This brochure by Dr. Christison is addressed to physicians as well as laymen and cites facts rather than to present arguments and aims to establish these facts by the best of references. The author gives the views of Dr. Hughlings Jackson on the Relation of brain to mind in chapter first, and asserts that notwithstanding the correctness of Dr. Jackson's statement that the materialistic doctrine of mind has been destroyed, it seems to be reviving with more assertiveness than ever. In chapter II. the author takes up the consideration of brain cells and their relation, and in chapter III. the theory of sensory and motor centers, condensing in a few pages the care of our present state of knowledge regarding these anatomical elements.

In chapter IV. the theory of mind localisation is discussed, the author citing many cases where injury to the frontal lobes has not impaired materially the mental faculties and concludes that the brain possesses functional substitution, a capacity that could not exist if brain and mind were identical.

Chapter V. is devoted to brain fever in relation to mind and deals mostly with the comparative anatomy of the brain.

Chapter VI., the size of the brain is considered, and it is found that the size bears no fixed relationship to any one psychic quality or combination of such qualities. In the last chapter the author discusses the normal mind or the prompt and coördinate action of all the mental faculties coëxisting with pacific disposition or temper. The different mental states, the faculties of the mind and normal decadence are clearly discussed and rigidly interpreted. The work is readable to layman and professional and is a very succinct psychological study of the most complex subject of the day.

The paper, print and binding are of good quality.

W. C. K.

MANUAL OF DISEASES OF THE EYE. For Students and General Practitioners. By CHARLES H. MAY, M. D., Chief of Clinic and Instructor in Ophthalmology, Eye Department, College of Physicians and Surgeons, New York. Illustrated. Duodecimo, pp. 419. New York: William Wood & Co. 1900.

The author states in his preface he has endeavored to present a concise, practical and systematic manual of the diseases of the eye. The idea of brevity has been foremost in compiling the book; however, nothing of special interest has been omitted and the average subject is taken up with sufficient detail to make the work valuable to the general practitioner and student.

The description of operations, location of opacities, physiological variations of the normal fundus, relaxation of accommodation, are especially good. Treatment of muscular and refractive troubles are very briefly discussed. The illustrations are good and the whole work shows painstaking effort to make a complete and valuable book of reference.—R. H. S.

PATHOLOGY AND MORBID ANATOMY. By T. HENRY GREEN, M. D., F. R. C. P., Physician and Special Lecturer on Clinical Medicine at Charing Cross Hospital, etc. New (9th) American from 9th English edition. Revised and enlarged by H. Montague Murray, M. D., F. R. C. P., Lecturer on Pathology and Morbid Anatomy at Charing Cross Hospital. Revised for America by Walton Martin, Ph. B., M. D , of the College of Physicians and Surgeons, New York City. Octavo volume of 578 pages, with 4 colored plates and 339 engravings. Philadelphia and New York: Lea Brothers & Co. [Price, cloth, $3 25 net.]

For many years Green's pathology and morbid anatomy has stood for excellence and superiority in the field of pathological research, and no better evidence of this can be adduced than in the presentation of the ninth enlarged edition. In spite of the fact that since the first edition was published, many authors have entered this field, nevertheless, Green's has passed from one edition to another, each keeping pace with the advances taking place and each improving on its predecessor.

In preparing a new edition of this favorite text-book, nearly one-half of the subject matter has been rewitten and many new sections have been added by the English editor, Dr. H. Montague Murray. In order to adapt the work still more fully to the needs of American students, it has been carefully edited by Dr. Walton Martin, who has supplied complete chapters on malaria and on the blood and has added a chapter on the preparation and staining of tissues for microscopic study.

The effective series of illustrations has been increased by 180 engravings and some colored plates, so that taken as a whole this standard work has been virtually re-created and will be found to respond to the wants of the student to even a greater degree than did its eight preceding editions.

The book is nicely bound in moroon colored linen, well put together and printed on heavy paper. —W. C. K.

A TEXT-BOOK OF PRACTICAL MEDICINE By WILLIAM GILMAN THOMPSON, M. D., Professor of Medicine in Cornell University Medical College, New York City; Physician to the Presbyterian and Bellevue Hospitals, New York. In one magnificent 8vo volume of 1010 pages, with 79 engravings. Lea Brothers & Co., Publishers. 1900. [Price, cloth, $5.00; leather, $6.00; half Morocco, $6.50.]

This is one of several excellent contributions to the literature of internal medicine that recently have been made in this country. Professor Thompson is a teacher of experience, who well knows the needs of students as well as practitioners of medicine. It is strictly speaking a modern text-book, presenting all the most recent facts and theories relating to the origin of diseases, their causation, pathology, prevention and treatment. Clinical microscopy and bacteriology occupy a prominence commensurate with their importance.

As might be anticipated in such a work by so experienced a teacher, due prominence is therein given to tuberculosis, a disease that is second to none in importance just now, and which outranks all other infectious diseases in destructiveness. The fact that it is preventable is slowly being recognised by the mass of physicians,and by the more intelligent of the laity. Formerly, this ravaging disease was popularly supposed to limit itself to the lungs, and even the profession has only comparatively recently recognised that it may attack almost any organ or tissue of the body. Thompson has set this latter fact forth most completely and forcefully.

Another section of the work to which we would especially invite attention is that portion which deals with diseases of the gastro-intestinal tract. There has been much advance of late in this class of diseases, which fact has been given due prominence by this author. The newer methods of diagnosis and treatment are duly set forth whereby the general practitioner will derive great aid and comfort in the management of these affections.

Diseases of the blood are attracting more and more attention with advancing time, and more accuracy in diagnosis is demanded. Thompson handles the subject, including diseases of the vascular system, with great skill. Examination of the blood itself becomes so important in very many diseases nowadays that none can afford to neglect it. It is not difficult to train one's self into sufficient expertness in this line to meet the requirements of clinical accuracy.

We might with propriety, if it were necessary, take up each section of the book, and discuss it chapter by chapter, in almost every one of which could be pointed out elements of excellence. This, however, in view of the general knowledge of practical medicine prevalent at the present day, we deem unessential. What the average reader of book notices desires to know is whether the work under consideration is one of scientific value, in which the science and art of medicine is fully maintained up to the present state of our knowledge.

This treatise is precisely one of that kidney, and no mistake can be made by student or practitioner who takes possession of it and adopts it as a guide.

There are numerous fine engravings in it which serve to illustrate with clearness many points under discussion.

A MANUAL OF PERSONAL HYGIENE. Edited by WALTER L. PYLE, A. M., M. D., Assistant Surgeon to Wills Eye and Ear Hospital, Philadelphia; Fellow of the American Academy of Medicine, etc. 337 pages; illustrated. Philadelphia: W. B. Saunders & Co. 1900. [Price, $1.50 net.]

Although this book unpretentiously calls itself a manual, it is really encyclopedic in character, there being seven authors or contributors to as many different sections, each more or less distinct, yet the whole is supervised by the editor, who has succeeded in blending the text into reasonable homogenity.

Dr. Charles G. Stockton, of Buffalo, contributes the first chapter or section, which deals with hygiene of the digestive apparatus. We know of no one more competent to teach or write upon this topic and the distinguished author has acquitted himself with great credit in his presentation of this subject. The contribution is clothed in simple, elegant English, of which the author is a master, and both lay and professional readers will take pleasure in reading what he says.

The hygiene of the skin and its appendages is of great importance. Dr. George Henry Fox, of New York, discusses the subject with acumen. In these days when the advertising "dermatologist" is abroad in the land, it would be well for people of intelligence to think twice before employing one, and meantime read Fox's article.

Dr. E. Fletcher Ingals, of Chicago, a laryngologist of great experience, writes upon hygiene of the vocal and respiratory apparatus; Dr. B. Alex. Randall, of Philadelphia, discourses upon hygiene of the ear; Dr. Walter L. Pyle, of the same city, editor of the book, tells us of the hygiene of the eye, and of the school-room; Dr. J. W. Courtney, of Boston, presents the hygiene of the brain and nervous system, while Dr. G. N. Stewart, of Cleveland, offers a final chapter, which briefly discusses the importance and methods of physical exercise.

This is most happily and emphatically a personal presentation of hygiene in its several bearings and belongs in the library of every well-bred person.

THE MEDICAL NEWS VISITING LIST FOR 1901. Weekly (dated, for 30 patients); monthly (undated, for 120 patients per month); perpetual, undated, for 30 patients weekly per year); and perpetual (undated, for 60 patients weekly per year). The first three styles contain 32 pages of data and 160 pages of blanks. The 60-patient perpetual consists of 256 pages of blanks. Each style in one wallet-shaped book, with pocket, pencil and rubber Philadelphia and New York: Lea Brothers & Co. [Price, seal grain leather, $1,25; thumb-letter index, 25 cents extra.]

We speak from experience when we say that this visiting list is one of the most satisfactory books in the market. It is not necessary to discuss the necessity of a visiting list. Every practising physician knows that he cannot conveniently dispense with this useful time-saver. The only question that presents is "which shall I buy?" No mistake will be made and there will be no regret if the *Medical News Visiting List* is selected. The above title gives an excellent general idea of the book, but one unfamiliar with it will be surprised to find how much valuable information of every-day practicality it contains.

LESSONS ON THE ANATOMY, PHYSIOLOGY AND HYGIENE OF INFANCY AND CHILDHOOD. Consisting of extracts from lectures given at Rush Medical College, by ALFRED C. COTTON, A. M., M. D., Professor of Diseases of Children; Accoucheur and Physician for Diseases of Children, Presbyterian Hospital. 100 illustrations. Chicago: Chicago Medical Book Co. [Price, cloth, $1.50 net.]

The author of this book has been a teacher of medicine for twenty years. Finding that the greatest drawback for a thorough comprehension of the diseases of childhood on the part of his senior students, was their ignorance of the special anatomy, physiology and hygiene of early life, he began his course in pedriatrics by a series of lectures to the junior class on these subjects. The book embodies these lectures. Teachers of pediatrics and students interested in this branch of medicine will both welcome the attempt which Dr. Cotton has made to place before the student knowledge of which he is in confessed need and which he can hardly get together for himself.

The book is illustrated by many plates and engravings, for the most part new. The chapters on anatomy present in clear brief manner the deviations from the adult type which obtain in early life. Then follow chapters on growth in which the changes that occur as age advances are enumerated. The greater part of the book deals with the subject of hygiene, a knowledge which is often painfully lacking in the young practitioner.

While Dr. Cotton's book is good it is disappointing, in that with careful editing it might have been so much better. A second edition will, we trust, remedy certain too obvious defects.—M. J. F.

DISEASES OF THE CHEST, THROAT AND NASAL CAVITIES. Including physical diagnosis and diseases of the lungs, mediastinum, heart and aorta, laryngology and diseases of the pharynx, larynx, nose, thyroid gland and esophagus. Fourth edition, revised. With 255 illustrations; 8vo, 765 pages. By E. FLETCHER INGALS, A. M., M. D., Professor of Laryngology and Practice of Medicine, Rush Medical College; Professor of Diseases of the Throat and Chest, Northwestern University Woman's Medical School, etc., etc. New York: William Wood & Co. 1900. [Price, muslin, $4.50; sheep, $5.25.]

This standard treatise is again welcome in a new edition. It has always been justly popular with general practitioners, as well as specialists. The author, taking advantage of the demand for new editions, has always kept its material fresh and abreast of the progress of the subjects with which it deals. It is a clear, concise, scientific work, written by a practical, as well as a scientific teacher. Its popularity is destined to continue in this new edition which, among other excellent qualities, has an admirable index,—a matter of no small amount.

A TEXT-BOOK OF PRACTICAL THERAPEUTICS. With especial reference to the application of remedial measures to disease and their employment upon a rational basis By HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. With special chapters by Drs. G. E. deSchweinitz, Edward Martin and Barton C. Hirst. New (8th) edition. In one 8vo volume of 796 pages, with 37 engravings and 4 colored plates. Philadelphia and New York: Lea Brothers & Co. 1900. [Price, cloth, $4.00; leather, $5.00 net.]

The unprecedented demand for this text-book has been met by putting forth eight editions of it in ten years,—an almost unparalleled record in medical book printing. Each time the author has improved it, bringing it forward to the date of publication in every instance. Each time, too, it has been enlarged as new facts have been developed, or old ones utilised, until now it is about as near perfect as such a work could be.

The author is such a practical clinician, is so expert in the bedside use of therapeutic measures, and withal, is so competent a teacher, that he is enabled to write with an *ex cathedra* forcefulness vouchsafed to few. This lays an excellent foundation for the making of a text-book, and easily accounts for the popularity of this and kindred treatises from Dr. Hare's facile pen.

The arrangement of this book is beyond criticism, it is of easy reference, and contains just what the hurried searcher needs to help him in his every day work.

BOOKS RECEIVED.

Transactions of the Texas State Medical Association. Thirty-second annual session held at Waco, Texas, April 24–27, 1900. H. A. West, M. D., Secretary.

Report of the Commissioner of Education for the Year 1898-99. Volume I. Washington: Government Printing Office. 1900.

A Text-Book of Histology, including Microscopic Technic. By A. A. Böhm, M. D., and M. von Davidoff, M. D., of the Anatomical Institute in Munich. Edited, with extensive additions to both text and illustrations, by G. Carl Huber,

M. D., Junior Professor of Anatomy and Director of the Histological Laboratory, University of Michigan. Authorised translation from the second revised German edition, by Herbert H. Cushing, M. D., Demonstrator of Histology and Embryology, Jefferson Medical College, Philadelphia. Octavo, pp. 501, 351 illustrations. Philadelphia and London: W. B. Saunders & Co. 1900. [Price, $3.50 net.]

International Clinics. A Quarterly of Clinical Lectures and Especially Prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Pediatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose and Throat, etc. Edited by Henry W. Cattell, A. M., M D. With the collaboration of John B. Murphy, M. D., of Chicago; Alexander D. Blockader, M. D., of Montreal; H. C. Wood, M. D., of Philadelphia; T. M. Rotch, M. D., of Boston; E. Landolt, M.D., of Paris; Thomas G. Morton, M. D., and Charles H. Reed, M. D., of Philadelphia. Volume III. Tenth series. 1900. Philadelphia: J. B. Lippincott Co. 1900.

A Manual of Materia Medica and Pharmacology. Comprising all organic and inorganic drugs, which are and have been official in the United States Pharmacopeia, together with important allied species and useful synthetics. For students of medicine, druggists, pharmacists and physicians. By David M. R. Culbreth, M. D., Professor of Botany, Materia Medica and Pharmacognosy in the Maryland College of Pharmacy, Baltimore. New (2d) edition. In one 8vo volume of 881 pages, with 464 illustrations. Philadelphia and New York: Lea Brothers & Co, Publishers. 1900. [Cloth, $4.50 net.]

A Manual of Hygiene and Sanitation. By Seneca Egbert, A. M., M. D., Professor of Hygiene in the Medico-Chirurgical College of Philadelphia. New (2d) and revised edition. In one handsome 12mo volume of 427 pages, with 77 engravings. Philadelphia and New York: Lea Brothers & Co., Publishers. 1900. [Cloth, $2.25 net.]

A Pocket Text-Book of Obstetrics. By David J. Evans, M. D., Lecturer on Obstetrics and Diseases of Infancy in McGill University Faculty of Medicine, Montreal. In one handsome 12mo volume of 409 pages, with 149 illustrations, partly in colors. Lea's Series of Pocket Text-Books. Edited by Bern B. Gallaudet, M. D. Philadelphia and New York: Lea Brothers & Co. 1900. [Cloth, $1.75 net; full flexible leather, $2.25 net.]

Sexual Debility in Man. By Frederic R. Sturgis, M. D., formerly Clinical Professor of Venereal Diseases, Medical Department, University of the City of New York; Ex-Visiting Surgeon to the City Hospital, Blackwell's Island; author of "A Manual of Venereal Diseases;" one of the authors of "A System of Legal Medicine," etc, etc. Small 8vo, pp. 432. Illustrated. New York: E. B. Treat & Co. 1900. [Price, $3.00.]

LITERARY NOTE.

THE well known firm of Reed & Carnrick has again placed in physicians hands a brochure, superior to any heretofore issued, on the different states and conditions of the blood in health and disease, embellished with many very fine colored illustrations. The great interest taken in blood examinations at the present time, the crystalisation of our knowledge into concrete facts, and their adoption to clinical medicine makes this brochure an extremely welcome one to many physicians, who do not care for the larger text-books on this subject.

The plates, illustrating the condition of the reds and whites in chlorosis, pernicious anemia, leukemia and the parasitic blood diseases are well executed and true to science. The reproduction of the triple stain is well rendered and the plates might well adorn some first class work on hematology.

Those physicians who have not yet received a copy of this brochure may obtain one by addressing the publishers.

ITEMS.

MESSRS. TARRANT & COMPANY, of New York, who have occupied the premises at the corner of Greenwich and Warren Streets in that city for nearly three-quarters of a century, suffered from a terrible disaster on the afternoon of Monday, October 29, 1900. First, an explosion occurred that blew up the magnificent Tarrant building together with several adjacent structures, after which fire broke out and completed the havoc, resulting in terrific destruction of life and property. The firm of Tarrant & Co. had so long and successfully conducted the drug business at the locality named that it had become one of the best known of the older established drug houses in New York.

Mr. Thomas F. Main, the president of the company, and his associates are entitled to receive the sympathy not only of their business confréres, but of the many physicians who have so long known this celebrated house that was renowned for its honorable dealings. We venture to hope that the business will soon be reëstablished on its former lines with an expanded plant.

MESSRS. M. J. BREITENBACH COMPANY suffered the destruction of their building and plant in the disaster that overtook the Tarrant structure, above referred to. The building of this firm was an absolute wreck, not one portion remaining, but fortunately none of the employees of the company received the slightest injury—an almost miraculous escape under the circumstances. The Breitenbach Company have established themselves at 68 Murray Street,and are filling all their orders with their former promptitude. Their Leipzig house makes shipments twice a week and, fortunately, at the time of the calamity a cargo was in the custom house awaiting delivery. We tender both our sympathy and congratulations to this enterprising house.

ON ADVERTISING page xxx. will be found an interesting opinion relating to antikamnia that was crowded out of its appropriate place.

THE late Dr. W. E. Robbins, of Hamburg, N.Y., left a valuable physician's library which Mrs. Robbins offers for sale. It includes many standard and useful works such as the U. S. Dispensatory, Hartshorne's Essentials of Practical Medicine, Sajous's Annual of the Universal Medical Sciences, Dunglison's Medical Dictionary, together with treatises on obstetrics, surgery, internal medicine, the several specialties and works on miscellaneous subjects. For particulars address Mrs. W. E. Robbins, Hamburg, N.Y.

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Original Communications.

LUPUS VULGARIS OF FIFTEEN YEARS' STANDING SUCCESSFULLY TREATED AND CURED BY EXPOSURE TO *X*-RAY.[1]

BY A. EVERETT SMITH, B. S., M. D., Olean, N. Y.

THE article which I am about to present today was prepared for the Olean Medical and Surgical Club, August 1, 1900. But since few heard the article at that time and as it has not yet appeared in print, your secretary has urged me to present it at this meeting.

That lupus vulgaris is a skin disease of the most persistent and incurable type, is evident to the student when he notices the long list of possible remedies for it, which our best authors recommend. That the pathology and treatment of the disease has been little understood, most practitioners of any great experience must admit when they recall their fruitless attempts to relieve these suffering patients. Pathological research points to tuberculosis as an etiological factor. Still, most of these cases have left one vivid impression on our minds by their failure to get well. Such, at least, has been my experience. After using the remedies and methods usually advised, I have seen the patient, uncured, drift on to others only to get similar results. To the conscientious physician such results are most humiliating and should spur him on to diligently seek other more successful treatment.

About two years ago, while making some experiments with bacteriological cultures, I observed the well-recognised fact, I believe, that cultures did not thrive so well when exposed to the light. About this time or later I noticed some experiments were being made by Dr. Finsen, of Copenhagen, Denmark, applying this principle in the treatment of some bacteriological skin diseases. The light used, however, I believe, was high power arc electric light and the sunlight, both used with a powerful condenser. My understanding of the Finsen method is that the diseased surface is exposed to the direct rays of the light used at stated intervals, and that the results have been very favorable in many cases.

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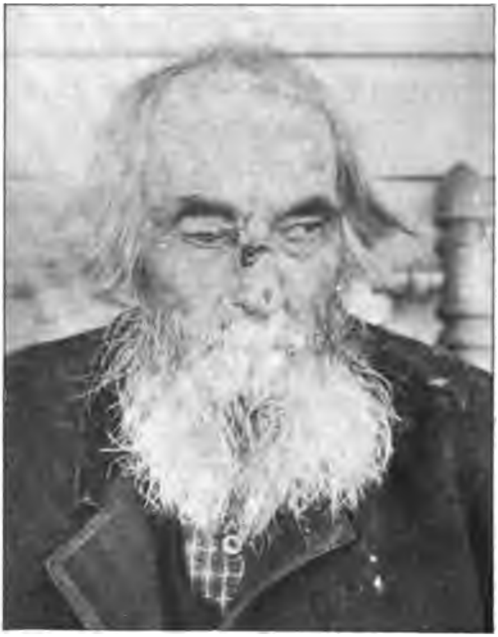
[1] Read before the Cattaraugus County Medical Society, Salamanca, N. Y., November 20, 1900.

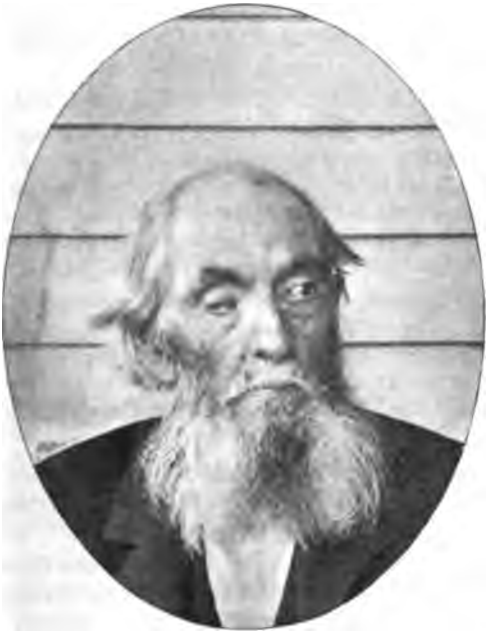
I was desirous of making some experiments with cases of lupus vulgaris, believing that by the use of the *x*-ray much better results could be obtained than by the arc electric rays or sunlight. I have accordingly the following case to report:



As nose appeared at beginning of treatment; showing lupous patch on nose of fifteen years' standing.

Frank Nichols, age about 80 years, of Shingle House, Penn., consulted me May 3, 1900, for an ulceration of the nose and face, which was involving his right eye. I found he had a lupus patch, which extended from the left side of the nose, going over the bridge and involving the right side of the nose, the inner canthus of the right eye and the inner thirds of the lids, together with the bulbous conjunctiva. He gave the following history: About fifteen years ago was slightly injured by a chip striking him on the bridge of the nose, breaking the skin. It never healed over completely but slowly increased in size, notwithstanding he had been treated by a score of physicians, a few skin specialists and numerous quacks. About a year ago it involved the eye, since which time it has progressed more rapidly in the mucous surfaces. There never was much pain from it, but it bled occasionally and disfigured him much. His general health and family history were good. No specific taint was elicited.

On commencing the treatment I took a photograph of his face, which I herewith submit, together with one taken June 10th, or about two months after the first. In both cases the negatives were not retouched, but show the skin just as it was.



After twelve exposures to *x*-ray, five days apart; showing lupus entirely healed.

I made a mask for the face, of sheet lead, cutting a hole for the nose and the diseased part of the right eye, and with this on exposed him about every fifth day for twenty minutes at a time, the diseased surface being placed about two inches from the light. He received in all twelve treatments. No medicine whatever was allowed. He was using applications of vaseline at first, but that was denied him. Marked improvement appeared after the second treatment, which was not interrupted until the sore was completely and entirely healed. After the second treatment healthy granulations appeared and healing was most remarkably speedy. There was no burning from the light or any other unpleasant symptoms complained of except a slight headache and a decided "crawling sensation" in the sore with the first two treatments. It will be noticed that the cicatrix has produced a slight ectropion by everting the inner end of the lower lid and has drawn the upper down and in, but vision is normal.

I do not claim priority in the use of *x*-ray in the treatment of lupus, though at this writing I have not noticed reports of any one else using it for this purpose. I wish to acknowledge the kindly assistance of my friend and colleague, Dr. Joseph C. Clark, of Olean, N. Y., who so cordially placed his static *x*-ray machine at my service in this case.

DISCUSSION.

Dr. ROCHESTER, of Buffalo, stated that since lupus vulgaris has become so generally considered a tubercular disease, and knowing the effect of light on tubercular bacilli, it certainly is along the line of expected consequences to believe this method might have good results. He expressed his appreciation of the paper and that he would certainly be interested to learn further the results of Dr. Smith's experiments.

Dr. A. A. HUBBELL stated that he was very much interested in the paper and the results of the treatment. While "one swallow does not make a summer," and this one remarkable success, as Dr. Smith expressed, does not establish the fact that all cases may be brought to so fortunate an issue, still the way it healed and the complete result suggests something more than accident.

Dr. JOHNSON, of Ellicottville, asked if there was not considerable danger of burning the epidermis by such prolonged exposures to the light.

Dr. J. C. CLARK said he was enthusiastic over the results of the treatment of this case, that he had the pleasure of being with Dr. Smith all through his experiments in the treatment, and that the details of the case and its manner of healing were far more remarkable than the author had evidently cared to present. Considering the age of the patient, the chronicity of the disease, its location and the surface and tissue involved, together with the manner by which it changed from a dirty sluggish ulcer to a healthy granulating surface, which healed so rapidly, were certainly most remarkable features. Certainly one case, no matter how successful, does not prove a proposition, but to have seen these experiments one cannot but conclude that they are very suggestive that the treatment will receive favor in the future.

Since Dr. Smith first reported this case I have been fortunate to be able to give the treatment a trial in another case: Mrs. H., aged about 60, of Olean, N. Y. She had a large angry lupus patch, involving the left ear and neck. Treatment was commenced September 28th last, using the same method as detailed by the writer. The results have been about the same, and at this time the lupus has almost entirely healed. This case was one of over five years' duration. Healthy granulations soon showed and healing has gone on very rapidly, until now only a small point remains, which I feel confident will be well in a few weeks.

Dr. **Smith** stated he thought there was no danger of burning the skin if the static machine was used with a mild tube. He thought most severe burns reported came where the coil and a powerful tube were used. He further stated that he saw and examined his patient the other day, now over four months after the healing, and there was no evidence of return of the disease.

CHOLELITHIASIS FROM THE SURGICAL POINT OF VIEW.[1]

By EUGENE A. SMITH, M. D., Buffalo, N. Y.,
Adjunct professor of clinical surgery, University of Buffalo.

IN THE past twenty years, remarkable advances have been made in abdominal surgery. Some men attribute this progress to technique alone, claiming that the brilliant results obtained by our leading abdominal surgeons have been attained by asepsis in operative work in conjunction with skill in operative procedures. Others ascribe it to accuracy of diagnosis, which is more and more sought for and with newer methods of clinical examination, and new lines of thought is more often attained. Granting to operative technique and accurate diagnosis their full measure of credit, it seems to me that we must give a fair proportion of credit for progress in abdominal surgery first to antiseptic measures summed up in the word drainage, which we employ in a large number of abdominal cases, and second, to the application of mechanical procedures in the operative treatment of diseased conditions interfering mechanically with the integrity of one or more organs or the functions of such organs.

Surgery has made its advance along these lines in the treatment of traumatism of the viscera, of appendicitis, of peritonitis, of obstructive and ulcerative conditions affecting the bowel, of ulcers and malignant disease of the stomach, and of inflammatory and obstructive disorders of the gall-bladder and its ducts.

It is no discredit to internal medicine to say that its field is limited when sepsis or traumatism, or disease producing mechanical interference with an organ or its function becomes threatening to life. While surgical treatment shows a high rate of mortality in grave cases coming under this classification, internal medicine offers practically no hope to the patient. The borderland cases between those coming properly within the province of medical treatment and those of such a nature as to belong unquestionably to the surgeon are on debatable ground still in many instances, and the physician is fortunate who makes no mistakes in adopting the proper line of treatment in all cases of abdominal disease.

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[1] Read before the Allegany County Medical Society, October 19, 1900.

In discussing cholelithiasis we find a subject broad enough to admit of discussion from the medical and surgical points of view. No one presumes to say that gallstones in the gall-bladder always call for surgical treatment, but no one can deny that numerous cases of suppurative cholecystitis and of gallstone cholemia have gone unrecognised and unoperated to a fatal termination, when surgery might have saved the patients. Judging from my own experience, the cases which clearly require operative interference to save life in a first attack of cholecystitis or biliary colic, with or without jaundice, must be rare. On the other hand, some practitioners overlook the fact that grave danger exists in these cases, and in a certain proportion of them this view results in tipping the balance against the patient, because the physician fails to urge timely surgical treatment in the cases that are beyond the reach of medical treatment.

Before we proceed to the discussion of the indications for operation in cholelithiasis, let us consider briefly the diagnosis of this condition from the surgeon's point of view. It is not necessary to rehearse the cardinal features of biliary colic, nor to dilate upon the significant appearances of icterus and cholemia when a plain history of frequent attacks of biliary colic can be obtained. Of cholecystitis it is sufficient to say it is easy to diagnosticate if jaundice is present after repeated attacks of biliary colic, and the patient is also acutely ill with fever, chills, digestive disturbance and a painful swelling in the right hypochondrium.

But when jaundice slowly develops without characteristic attacks of biliary colic, yet with painful attacks simulating biliary colic, diagnosis as to gallstones may be obscure. In one such case, seen with Dr. W. H. Mansperger, there was notable tenderness and rounded pyriform enlargement in the region of the gall-bladder. The patient was a man fifty-five years old, who complained of illness of six weeks' duration, beginning with jaundice, but who had had colicy pain on the right side at times for more than twenty years. He gained in weight for a time under Carlsbad treatment. After a few weeks, however, jaundice deepened and tenderness became more marked, stools were clay-colored, urine coffee-colored showing bile pigment, temperature was raised, leucocytosis not present. He fell off a few pounds in weight and became weaker. With a diagnosis of possible cancer, operation was undertaken to relieve the jaundice by a cholecystenterostomy. I found cancer of the omentum involving the gall-bladder. The operation gave no relief, the patient dying eight days later of cholemia.

In acute cholecystitis without jaundice the diagnostician is likely to be led astray. I have operated upon two cases which were diagnosticated to be appendicitis and were treated accordingly. The history of the more difficult of the two as regards diagnosis is as follows:

Mrs. T., aged 32, mother of two children, nursing a six months baby, had always had good health, except occasional attacks of indigestion with colicy pain, mainly referable to the right side, but with no history of jaundice. On September 4, 1900, her physician, Dr. E. E. Koehler, found her in one of her attacks, having acute pain most marked on the right side low down, with vomiting, constipation and excessive tenderness at McBurney's point, temperature and pulse raised. On his first visit he detected an obscurely outlined rounded mass, which muscle spasm and rigidity made vague, and which thereafter he could not feel, nor could I upon September 7th upon seeing her in consultation, till the patient was anesthetised. I agreed in the diagnosis of probable acute appendicitis with pus formation, temperature being 103°, pulse 120, respirations 32. Under chloroform ready for operation I found the mass pyriform, base entering the right inguinal region well below a line from the navel to the anterior superior spine of the ilium, the broad bulging body not felt at McBurney's point, and a neck extending upward to the region of the gall-bladder. The diagnosis was thereupon altered to that of sepsis, involving the gall-bladder or the appendix. Operation revealed a suppurative cholecystitis. The free border of the liver was found an inch below the free border of the ribs. The pyriform cholecyst was distended with glairy seropurulent fluid, more thickly purulent low in the sac and in the cystic duct, and not bile-stained. This sac-like mass projected well below the liver edge and was movable upward, inward and outward, somewhat resembling a floating kidney. Over seventy large and small calculi were taken from the gall-bladder, and bile began to flow upon removing a large stone lodged firmly in the cystic duct. The appendix having a distinct kink due to an adhesion, was also removed. In examining her scar on October 25, 1900, I found it to be three inches long, one-half extending above and one-half below a line drawn from the navel to the anterior superior spine of the ilium, and with its upper end two inches from the free border of the ribs. The incision indicates the spot where the mass was prominent and also the operator's uncertainty as to the condition to be attacked. In this case it was possible to make an appendectomy and cholelithotomy through one reasonably short incision, followed by drainage of a septic gall-bladder.

In dropsy of the gall-bladder due to occlusion of the cystic duct by calculi, a condition resembling floating kidney is found, and one patient found her way to me for operation for floating kidney sent by her physician, who had treated her for numerous attacks of colic, which he considered renal, but which were doubtless biliary. In this case moderate icterus was present and the tumor was pyriform, could not be moved downward on palpation, apex was up and was continuous with liver at the site of the gall-bladder under the free border of the ribs.

In a second case, which I saw with Dr. Carlton R. Jewett in June, 1900, he had excluded floating kidney, partly by the history of occasional jaundice and biliary colic, and cholelithiasis was further verified by sifting the feces and finding several small calculi. The tumor here was obscurely rounded, large, extending down to the line between navel and anterior superior spine and was tender. The patient was a tall, fleshy woman, 64 years old, and suffered constant right-sided pain, made more intense by lying on the left side. In operating I opened down on an enlarged right lobe of the liver, which proved to be the tumor, and under its margin I found an elongated gall-bladder full of inspissated bile and more than one hundred calculi, ranging from a pin-head to a bean in size. The largest ones were lodged in a sac-like dilatation of the cystic duct. My drain in this case upon closure of the wound emerged at McBurney's point.

The low situation of the gall-bladder in six of my cases, all of them women who had borne children, and the notable extreme low situation in the two cases just reported, leads me to believe that corsets and child-bearing must together influence this ptosis of the liver and gall-bladder, giving it a lower position than that assigned it in our anatomies.

When cholelithiasis with ulceration of duct or cholecyst has resulted disastrously in local or general peritonitis, diagnosis is at times much obscured. In a case of Dr. Mynter's, in which I was his assistant, duodenum, colon, stomach, gall-bladder and omentum were so matted together that cancer was diagnosticated after opening the abdomen. Death resulted some time later from sepsis, and a large calculus was found to have ulcerated through the common duct and to be the center of an inflammatory mass, in the center of which it lay surrounded by pus, the matted organs mentioned making up the supposed malignant tumor.

In discussing hepatic abscess, obstruction of the bowel, general peritonitis and malignant disease in the hepatic region, cholelithiasis must not be overlooked. In all these conditions it at times enters as an etiological factor likely to confuse and obscure diagnosis if not considered.

Turning now to a consideration of the indications for operation for cholelithiasis, we enter upon debatable ground. Is biliary colic a reason for cholecystotomy? The vast majority of patients suffering from a primary attack are not operated upon, and the conclusion is often drawn that operation is, therefore, not indicated. But death has been known to result from the shock produced by the passage of a biliary calculus. It may also be said that a certain number of cases after the first attack of biliary colic will develop immediately obstructive conditions in the ducts or septic conditions from infection, or even perforations of the ducts and consequent general peritonitis. In these cases the conservative practitioner must yield to the operator. Operation is also indicated if biliary colic recurs, the attack becoming more frequent and more severe. Outside of the question of dangerous sequelæ of gallstones in the gall-bladder, the attacks of colic are debilitating from the agony of body and distress of mind they entail. From another standpoint, Greig Smith asserts that in more than 80 per cent. of cases of cancer of the liver and gall-bladder and their ducts, calculi are found. While the relationship of cholelithiasis to cancer is not fully investigated, there seems reason to urge cholelithotomy in cholelithiasis to lessen the danger of the development of cancer.

Hydrocholecyst, or dropsy of the gall-bladder, due to obstruction of the cystic duct by stricture or calculus, may reach enormous size with dangerous thinning of the cyst walls and finally make operation highly necessary. The following case, seen with Dr. W. H. Mansperger, is extremely interesting to me, showing the obstructive effects, first of calculus, which was relieved by cholecystotomy, and second, of cicatricial development, which is at present causing trouble:

The patient, Mrs. D., aged 32, mother of six children, had had many severe attacks of biliary colic without jaundice, until April, 1900, when she had an attack followed by jaundice, just after her last confinement, the baby being three weeks old. On May 9, 1900, I made a cholecystotomy for moderate jaundice and pyriform tumor in the right hypochondrium. I found one gallstone the size of a large hickory nut occluding the cystic duct, as was proved by the glairy mucoid material contained in the gall-bladder. This fluid was like white of egg, not at all bile-stained, and distended the gall-bladder, making a sac the size of a large pear. Bile was discharged after the operation, but soon ceased, the jaundice passed away and the wound closed. A few weeks later the pyriform tumor reappeared and the same mucoid material was evacuated upon opening a pointing vesicle-like pouch in the line of the scar. The same fluid now constantly forms and at intervals of a few days needs opening to relieve pain. The patient opens the gall-bladder herself with a knitting needle when distention becomes painful. A probe can be swept around within the gall-bladder and meets with obstruction not due to calculus about five inches from the surface. In this case, cicatricial contraction at the site of the calculus which was removed has occluded the cystic duct. The patient is now considering the question of cholecystectomy, which I advise for the relief of her hydrocholecyst.

A frequent complication of cholelithiasis, arising from infection, is suppurative cholecystitis, leading to empyema of the gall-bladder. Among my cases of cholecystotomy, six in number, three were urgently necessary because of this condition, one of which I have already mentioned. The dangers here are septicemia, perforation or gangrene of the gall-bladder, massing and matting of adhesions with bowel obstruction, biliary fistulæ, general peritonitis and death. In this class of cases membranous shedding of the mucosa of the gall-bladder may occur, a condition which I found in the case of Mrs. S., operated upon September 9, 1897, at the German Deaconess's Home. The specimen of exfoliated mucosa, with perhaps some of the muscularis, I still have preserved in 1 per cent. formalin solution. In this case the calculi numbered six, four of them very large, each being the size of a hickory nut.

Biliary fistula, opening externally, occasionally follows suppurative cholecystitis, where fortunately for the patient pus points and is evacuated on the surface. This termination of bile tract infection by a natural cholelithotomy is rare, and should in no sense be urged as an argument in favor of nonoperative treatment. In the case just mentioned of suppurative cholecystitis with gangrenous exfoliation of the mucosa, a large calculus in the cystic duct was purposely left because of depth and immobility of the stone and the friable septic condition of the cholecyst. Later the stone could be readily and plainly touched with a probe deep in the gall-bladder. The biliary fistula refused to close and six months later I reoperated and removed the calculus after crushing it, finding, upon reassembling the fragments, a stone the size of a hickory nut. In this case the calculus had unquestionably worked toward the fundus of the gall-bladder and nearer the surface and thus cholelithotrity was made much easier, at a time when reparative work had eliminated the dangerous features of sepsis present at the first operation.

Obstruction of the common duct by lodgement of a calculus also demands operation to overcome persistent icterus and to prevent the development of cholemia. In the case of Mrs. O., referred to me by Dr. J. S. Smith and operated upon April 25, 1900, at the Sisters' of Charity Hospital, lodgement of a calculus took place in the common duct, following the last of several severe attacks of biliary colic, characterised by icterus of brief duration. The last attack occurred in August, 1899, and the icterus lasting more than six months led to the development of eczema, by which the patient was driven to operation because of intolerable itching of arms, legs and body. Thirty stones were removed by cholecystotomy, one large one from the common duct. The fistula closed in two weeks, jaundice disappeared in three weeks and no itching has been noticed since. She lost most of her hair while jaundiced, and since the operation has recovered it. This same case illustrates the so-called "ball valve" action of a calculus, a condition which also calls for operative relief. In cases of this class, a calculus, which is too large to pass through the duct, becomes movable in a sac-like expansion of the duct due to the distention caused by backing of bile. Characteristic attacks of gallstone colic with accompanying jaundice recur.

Lastly, obstructive lodgement of calculi in the common duct may promote infection and suppurative cholangitis, the sequelæ of which are sepsis and hepatic abscess, conditions amenable only to surgical treatment.

The pathology of cholelithiasis is too extensive a subject to come within the scope of this paper, but it may be said that bacterial infection of the bile tracts is now considered to be the prime factor in etiology.

It is known that the colon bacillus is pus-forming, and under favoring circumstances, especially when mechanical interference with the biliary flow arises, it may lead to suppurative cholecystitis and empyema of the gall-bladder. Other infectious organisms, according to recent investigations, are found to lead to pus formation in the biliary tracts. When local conditions or the character of the bacteria lead to an infection of the catarrhal inflammatory type in the bile tracts, suppuration does not take place, but the deposit of cholesterin and bile salts about a focus of bacterial activity leads to gallstone formation. The colon bacillus and the typhoid bacillus have lately been found by numerous observers as the basis of biliary calculi.

When we consider cholelithiasis from this pathological point of view, the treatment is put upon a broad surgical plane that leaves to internal medicine the close study of the subject from the diagnostic standpoint with a view to the course to be followed in treatment. Treatment should be pursued along medical lines after diagnosticating cholelithiasis to the point of determining that its manifestations are threatening to the patient from the element of sepsis, or of mechanical interference with the biliary flow or the conjunction of these two elements. Internal medicine should then call upon surgery to drain for sepsis and to afford mechanical relief to mechanical interference with the biliary current.

In conclusion, at the risk of being tautological, I will say that to me it seems that the indications for operative treatment of cholelithiasis can be summed up under two headings: In the first place, operate for biliary calculus obstruction along the bile tracts, which has in its train of sequelæ recurring colic, hydrocholecyst, persistent jaundice and cholemia; in the second place, operate for sepsis of the bile tracts when it develops such dangerous conditions as suppurative cholangitis, suppurative cholecystitis, or perforation of the duct or cholecyst. In both classes of cases suffering and death are to be dreaded in the majority of cases more from the disease and its sequelæ than from the surgeon's knife.

1018 MAIN STREET.

THE IMPORTANCE OF THE POSITION OF MEDICAL EXAMINER FOR LIFE INSURANCE.[1]

BY FRANK W. MALONEY, M. D., Rochester, N. Y.

IN BRINGING the subject of medico-insurance before you today, I do so with the idea that I might possibly set forth a few thoughts for the benefit of those of you who are interested as examiners for insurance companies, or those of you who are seeking an opportunity to act in that capacity.

The business of life insurance has developed so rapidly in this the closing of the century, and representing the aggregate number of risks in force at the present time in dollars, appalls the wildest flights of the imagination. Billions is the word used now when expressing the vast interests of life insurance, over fifteen billion dollars of insurance being in force at the close of last year.

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[1] Read at the thirty-third annual meeting of the Medical Association of Central New York, held at Rochester, N. Y., October 16, 1900.

The medical examiner being a factor in this process, the question is, [1]Does the medical profession (or the class identified with insurance) fully appreciate the responsibility laid upon it by the business, or if appreciating it, does it measure up the requirements and fairly meet the obligation implied where such a vast sum of money is involved? In my opinion, I do not believe that the profession as a whole fully appreciates and considers the important position they occupy as the guardsmen of such vast financial interests. Why? Because they have not been taught the requirements of an examiner before they graduated. A large number of medical men when in practice a few years learn that the income and recognition derived from medico-insurance practice is very desirable, and here do they feel that they have the necessary qualifications to carry out and perform this kind of work.

What does an insurance company desire in its medical representative? They say, he must be a full-fledged physician. It is not enough that he be a graduate of a reputable medical college; he must have a fitness for the position. Companies ask a candidate to fill out a blank carefully devised to bring out the needed information as to his educational preparation. His name, age, date of graduation, and name of college, hospital experience, membership in societies, and has he had instruction in physical diagnosis, microscopy, bacteriology, urinary analysis, hygiene, and how long has he practised, and references from reputable physicians and business men in his community. Companies desire intellectual work and not mere routine duty. Their business is of vast interest and it will never be less than it is today, and therefore physicians trained in the allied sciences are needed. As insurance takes in everything, "it is a science of general averages, and probabilities enter largely into the business." A medical examiner should possess the diagnostic skill of a successful practitioner, combined with tact and judgment, as occasions will arise when such attainments will be very useful. If he conducts his practice in a careless manner, he is sure to do likewise in the examination of the applicant. An examiner must be a man of integrity; his reputation is at stake each time he makes out a medical report, as insurance is a legal business and governed by the laws of the state, which renders him liable to be questioned concerning the statements he makes over his own signature. This phase is often overlooked in examinations.

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[1] The "Medical Examiner," June, 1897.

The examiner performs his work for pay and it is paid for; therefore, it is a commercial transaction and false pretenses have no more place here than anywhere else. Physicians are bound to perform their duties here as in any other branch of their work, that is, to make examinations according to the principles and practices which prevail among medical men generally. That is the rule which the law holds them to in general practice, and that is the rule which the court would lay down if such questions were brought before it.

How few practitioners are competent to make a thorough examination of an applicant. A writer in the *University Medical Magazine*, of Philadelphia, says that only 20 per cent. of physicians in private practice make urinary examinations or know how to make them. This fact, if true, is deplorable, and in the present day of exact sciences it demonstrates slip-shod methods on the part of the faculties of colleges.

It should be the aim of practising physicians to fit themselves for examiners for life insurance companies, as it will be the means of getting better known and meeting individuals with whom they would otherwise never have come in contact, and this acquaintance under auspices which naturally makes an impression upon those examined.

We come now to the examination of an applicant. The first impression one gets of an individual is certainly a very valuable one, and should not fail to be noted on the examination paper. Does he appear to be a man who would indicate resistance to fatigue; does he look strong and healthy? We know that there are some individuals who, upon most careful examination, show nothing whatever the matter with them, but yet there is something about them that impresses one that they will not be long-lived. Is this the case with the applicant? Does he look as if he was worrying about business cares? Does he look as if he took care of himself? Does he eat his meals quietly and give the food time to digest? It is this very impression in one accustomed to making a number of examinations that is as important as his power to detect disease, and frequently upon the closest examination the examiner will not be able to detect disease in an individual, yet he is impressed with the fact that he has not a healthy appearance.

It is the detection of this want of power of resistance to disease on the part of the applicant that constitutes the best class of examiners. We know that the great majority of men of the present day, who in the mad rush for wealth and existence cannot long stand the strain and tear upon the system to which they submit themselves. There are some men who can stand it because they have a strong and healthy constitution, but, by far, the majority of cases succumb to disease before the expectation of life.

The examination should begin by a study of the applicant as a whole, by noting the color of his eyes, his complexion. Does his skin show a healthy hue? are his eyes bright? does his face exhibit the appearances of health, not drawn by disease or lined with wrinkles, which denotes premature ageing? Note the color of the hair and examine the tongue, and see whether there is any evidence by it of disease or disorder of the digestive tract, and include in this the throat for ulcers, patches, chronic pharyngitis, enlargement of the tonsils, or any indications which would point to cancer or syphilis. Is the eye bright? are the pupils equal? have they the appearance of sleepiness or drowsiness, to denote the use of narcotics? Is the tongue thickly coated or eyes bloodshot? the odor of the breath like the peculiar odor of drinkers. Then the appearance of the skin: Is there eruption or the cachexiæ of the various diseases? yellowness or anemic condition? puffiness about the eyes? pallor, blueness of lips, prominent cheek-bones with the hectic of phthisis? and during the conversation the applicant's voice and the rapidity of the breath should be noted. The habits of the applicant have an important bearing on life insurance. Intemperance in the use of alcoholic drinks is a fruitful source of disease: we see this in the condition of the nervous system, the eye, the tongue, and also with excessive beer drinking. Tobacco in excess produces a disturbance in the nervous system, causing rapid pulse, palpitation of the heart, loss of appetite and emaciation.

The pulse, as a rule, is indicative of the heart, but at times, owing to the atheromatous condition of the vessels, the pulse wave may distinctly differ from the cardiac impulse. A slight intermittency may be noted in the pulse which would escape one's attention upon examination of the heart. The sphymograph is used to a decided advantage.

The heart should be examined before the chest in general, because the circulation is excited by the increased respiration during the examination of the lungs. Palpitation, percussion and auscultation will give the desired knowledge of the cardiac sounds, showing the different impulses, irregularity of heart's action.

The applicant should be divested of his coat and vest during the physical examination. In measuring the chest, the tape should be placed at about the third costo-sternal junction, so as to avoid the mammary glands, and the waist measure taken on a line with the umbilicus. By lifting up the shirt and underwear, on inspection an idea is obtained of the vital functions of the heart and lungs, the apex beat is noted, the shape of the lungs and deformities, if any, the rate of respiration, the degree of inspiration and expiration.

Next, by percussion we note the various sounds in all parts of the chest, and the examiner knowing the normal, those of disease he would readily distinguish. By auscultation, either with the ear or stethoscope, the various conditions of the respiratory sounds are heard.

The man who knows he is not up to par feels the necessity of insurance, but the phthisical man imagines himself improving in health until the time of his death. He will conceal the fact that he has had hemorrhages, morning cough, emaciation and shortness of breath. Here the thermometer, special attention to the apices, the family history, and in suspected cases examination of the sputum for tubercle bacilli.

In the examination of the abdomen the examiner should make use of inspection, palpation, percussion and auscultation, as with the lungs and chest. The liver should be examined while standing for evidence of tenderness, or bulging and enlargement or atrophy. The spleen in like manner. The bowels should be palpated, also the bladder, genito-urinary organs and rectum,—the rectum for hemorrhages, fistula and cancer. In the examination of the urine (every medical examiner should be fully posted as to the testing of the urine), the first important test is for albumin, and second that for sugar, because evidences of Bright's disease and diabetes can be detected years in advance of the disease. Here the microscope will demonstrate the finer tests, such as casts, urea, pus and oxylate of lime. Finally the nervous system. Here slowness of speech sentences broken off or uncertain, efficiency in memory, agitated lips, tremulous tongue, double sight and step defective. Here also evidences of locomotor ataxia must be looked for, neuralgias, headaches, vertigo, syphilis and nervous prostration.

With the examination of women, special attention should be given to the breast and the abdominal organs, the menstrual changes and child-bearing.

And now, after the applicant has signed the report, the examiner's best judgment, his honesty and his integrity is brought to meet the summary. Is the applicant a first-class risk? Is he a good risk, or only a fair risk? Here the golden rule must be remembered.

Personal friendship, fraternal ties, professional relations or sympathetic interests, are not to be considered if the examiner is an honest man. His rating should be according to the dictates of his conscience, and when he allows an applicant to pass as a first-class risk when he knows the applicant is not one, that examiner underestimates the importance of his work, his private practice will run accordingly vascillating.

There is a great deal to be said on this very important subject, but the limits of a paper of this kind cannot encompass it all. I would, therefore, in conclusion earnestly ask the members here present who are associated with the colleges of Buffalo and Syracuse, to use their best endeavors with the faculties that at least two lectures be given to the graduating class on the subject of examining for life insurance companies, and a thorough course in physical diagnosis. We know that owing to the importance of this kind of work life insurance companies demand that their examiners be in practice not less than three years, and some of the companies make five years the limit. It is a sad commentary on the ability and honesty of our profession when one company divides its insurance into two classes, as an experiment, keeping and noting the record of those examined and those unexamined, to find after a certain number of years that the mortality of those unexamined was less than that of the examined. This blot on the profession can only be erased by the colleges teaching their graduates the importance of this kind of work. A thorough medical examiner will make a successful practitioner.

332 West Avenue.

CIRSOID ANEURISM OF THE EAR.[1]

By WILLIAM S. CHEESMAN, M. D., Auburn, N. Y.

SINCE childhood the patient, Mrs. C., has had a cirsoid aneurism of the left ear, which began as a simple telangiectasis, and gradually assumed the formidable appearance and character which I found at my first examination. The whole organ was then enlarged and protuberant, the lobe hanging low on the neck, and everywhere were visible throbbing and twisting arterial varices. The patient had had two children and was at this time four months pregnant. Some little time before, while going about her household duties, one of the wicked-looking varices suddenly ruptured, shot a stream of blood across the room, and caused severe blood loss before it was controlled. The haunting fear of a recurrence of this accident was the prime cause of her seeking relief.

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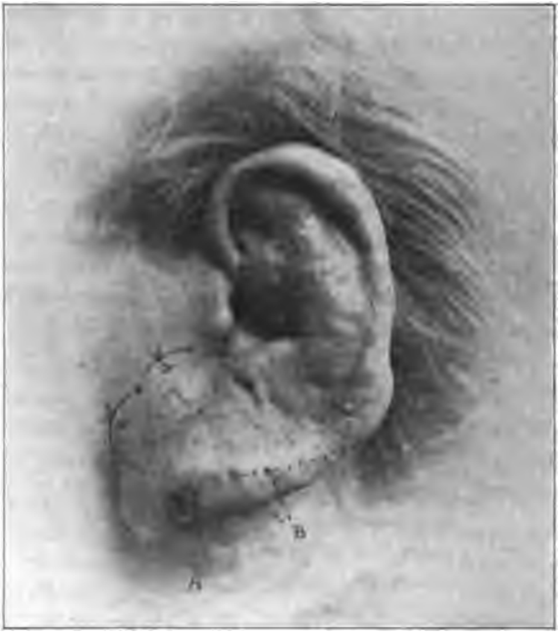
[1] Read at the thirty-third annual meeting of the Medical Association of Central New York, held at Rochester, N. Y., October 16, 1900.

Pressure on the left common carotid completely controlled the pulsation in the ear. She was therefore advised to have the carotid ligated as a preliminary if not final measure, it being thought that this would remove the danger of sudden uncontrollable hemorrhage, and that after her confinement further steps could be the more easily taken to reduce the size of the ear.



RESULT AFTER FIRST OPERATION.

Dotted line shows part excised at second operation. Length of Ear, four inches.
a-a—Ligatures—temporary—to control bleeding. B-B—Spots caused by electrolysis needling.

Deligation of the left common carotid was performed at the Auburn City Hospital, February 12, 1896, the vessel being tied with stout catgut above the tendon of the omohyoid muscle. Pulsation of the varices in the ear ceased at once with the tying of the ligature. The wound was closed with silkworm-gut and the patient rallied nicely from the anesthetic. Primary union ensued and no disagreeable effects referable to changes in the cerebral circulation were noted, save some transient headache and dizziness.

A photograph of the ear, taken before the operation, unfortunately scored a failure. The picture which I show you exhibits the ear after the first operation and after some attempts at needling with electrolysis needles, which proved unsatisfactory. It gives but a poor notion of the threatening aspect of the organ when I first saw it, when it resembled nothing so much as a squirming bundle of pulsating worms. It has shrunken much, and the venous sinuses are empty, only the organic scaffolding of the growth, the arterial and venous walls empty of blood, and the connective tissue, remaining. After operation the ear measured four inches in length, its fellow measuring two and one-half inches.

The patient was delivered of a healthy child during the summer of 1896, and returned to the hospital on December 1st for a plastic operation, to reduce the size of the enlarged lobule. A slight return of pulsation could now be felt in the ear, so, as a preliminary, two control ligatures were placed as shown in the photograph, and the lobule was shut off from the rest of the ear by long-bladed pressure forceps having rubber rings about the handles, the blades grasping the ear in its full width just below the anti-tragus. A piece of the lobule was then removed with scissors as shown by the dotted line in the illustration. The raw edges were whipped with large catgut and the ligatures and forceps removed. Considerable oozing ensued from the needle punctures, and a steady large flow in one place necessitated leaving on a hemostat for forty-eight hours.

I have since regretted that a larger mass was not at this time taken away. I counted on greater retraction than has occurred. The inflammatory reaction which ensued brought about some swelling of the ear and a thrombosis and consolidation of the venous sinuses, and some contraction has followed, but it has not been as great as I anticipated. On January 29, 1897, the ear measured three and a quarter, in June three and one-eighth, and in November three inches. But it has not greatly changed since that note and is still five-eighths inch longer than its fellow. All pulsation has ceased, but it remains rather a large member. I have advocated a further operation for the reduction of the remaining hypertrophy, but the patient is so well satisfied with her present safety and improved appearance that even the argument usually so convincing to her sex—namely, the cosmetic, —fails to move her.

PRIMARY SARCOMA OF THE TONSIL: REMOVED BY EXTERNAL PHARYNGOTOMY.[1]

By NATHAN JACOBSON, M. D.,

Professor of clinical surgery, College of Medicine, Syracuse University; Surgeon to St. Joseph's Hospital, Syracuse, N. Y.

STEPHEN D., aged 31; Austrian; married. Referred to Dr. T. H. Halsted by Dr. J. F. Kauffman, May 1, 1900. During the past three or four years, on several occasions, had attacks of quinsy—relieved by incision. Eighteen months ago had what was again called quinsy. An opening was made, with temporary relief, but ever since there has been a sense of fulness in the throat, difficulty in swallowing, and a mass steadily increasing in size. Six months ago, while in Austria, the swelling was incised without benefit. General health has been good—only complaint being difficulty in swallowing and of late pain extending to left ear; voice thick and muffled; no dyspnea. Has lost some in flesh.

Examination showed left tonsil to be enormously enlarged, reaching down to and apparently involving the base of the tongue. Tumor extended across the median line, its vertical diameter estimated to be about three inches, the antero-posterior one and three-quarter inches, the transverse two inches. Tumor was adherent to the anterior and posterior pillars, but did not extend above the arch; nodular, hard as stone, but at some points less firm and, indeed, elastic, but no evidence of ulceration anywhere. Cervical lymphatic glands same side involved. No specific history nor evidence of specific disease.

Dr. Halsted made diagnosis of malignant disease of the tonsil and kept him under observation until June 21, 1900. During this time the growth slowly increased in size. Patient was given large doses of iodide of potassium. A small piece of the tumor, removed with cold snare, was sent to Dr. Kieffer for pathological study. He reported it to be nonmalignant. Dr. Halsted referred patient to me for operation. This was performed with the assistance of Drs. Halsted and Dayan at St. Joseph's Hospital, June 22, 1900. Before anesthesia was completed, cyanosis became so extreme that tracheotomy was imperatively demanded; venous bleeding very profuse, but ceased with introduction of the tracheotomy tube. Chloroform was used throughout the operation. The patient's head was held in a dependent position.

Incision was made along the inner border of the sternomastoid from a trifle back of the angle of the jaw and carried downward to the upper border of the thyroid cartilage. There was such a large glandular mass in the submaxillary triangle, that to clear it out a second incision had to be carried upward over the lower jaw on a line with the angle of the mouth. Veins in this triangle were enormously enlarged. These were doubly ligated and severed between the ligatures.

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[1] Read at the thirty-third annual meeting of the Medical Association of Central New York, held at Rochester, N. Y., October 16, 1900.

After removing the diseased lymphatic glands I proceeded to expose the external carotid, and then tied its facial and lingual branches; cut my way through the muscles of the floor of the mouth, exposing the tumor. With the mouth held open with a gag, an assistant attempted to push the mass down to me by carrying his finger into the mouth. It was adherent to the soft palate, to the lateral wall of the buccal cavity, to the floor of the mouth and the lateral surface of the tongue, and extended downward into the neck, being attached to everything as far as the hyoid bone. It was impossible to save the hypoglossal nerve, as it was imbedded in the tumor. I cut away the stylohyoid and the other muscles of the upper hyoid group at their attachments to the hyoid bone. It was very evident that the tumor, on account of its size, could not be removed without section of the lower jaw. After extraction of the second molar tooth, the jaw was divided with the chain saw directly in front of the last molar. Drawing the severed ends of the inferior maxilla apart, I separated the tumor from the palate and other structures to which it was attached, by means of a scissors. A great many ligatures were required to control bleeding. Oozing continued, but was nicely arrested by suprarenal extract dusted into the wound. The jaw was secured by wiring without drilling, by carrying the wires around the neck of teeth. Closed the wound by interrupted silkworm-gut and catgut sutures and drained through the outer and upper part of my incision, using iodoform gauze wicking. During the latter part of the operation an intravenous saline injection seemed necessary. He was put to bed in good condition and stimulants were administered hypodermatically and per rectum.

For the first three days after operation his nourishment was administered entirely by rectum. Patient's progress towards recovery was interrupted by a mild pneumonia, which began immediately after operation. During this period the temperature rose to between 101° and 103°, and pulse and respiration correspondingly accelerated. A profuse expectoration of foul odor necessitated the continued use of the tracheotomy tube for nine days. The wound in the trachea healed kindly.

The wiring failed to hold the severed ends of the jaw satisfactorily, so Dr. Dayan took an impression of the jaw and made an interdental splint, which worked admirably, permitting him immediate use of his jaws. This was applied on the 7th of July.

His general health has steadily improved. He weighs some twenty-five pounds more than at the time of operation. There is a partial paralysis of the lower part of the face and of the left half of the tongue. There was some interference with the repair of the jaw. An infectious periostitis occurred at the point of section, with slight exfoliation of bone, which, however, is quite firm now, although it is still thought best to allow him to wear the splint, as it causes no discomfort and gives him firmer support.

Dr. Theo. L. Kieffer, who as stated made the first microscopic examination, made sections of the growth after its removal and pronounced it to be a small round-celled sarcoma.

Through the kindness of Mr. W. H. Walmsley, of Philadelphia, I am able to present to you three photomicrographs of 70, 95 and 170 diameters respectively. I present to you, furthermore, both the specimen removed and the patient operated upon.

COMMENTS.

I shall not attempt an exhaustive consideration of this subject. Time does not permit it.

Malignant disease of the tonsil is rare. MacCoy records that of 10,000 malignant tumors treated in four London hospitals, but nine occurred in the tonsils, and of these nine but one proved to be a sarcoma. In 1887, Butlin stated in his work on "Operative Treatment of Malignant Disease," that he had been able to find records of but twenty-three cases operated upon for this condition. Newman, *Journal of American Medical Sciences*, May, 1892, reports that he has collected 144 cases, operation being attempted, however, in only 56 of them.

We encounter both sarcoma and epithelioma of the tonsil. I have met one case of epithelioma also. I operated upon him at his home in Otisco, N. Y., November 14, 1889, at the request of and with the assistance of his physician, Dr. F. W. Sears. He was a farmer, 61 years of age, and had increasing dysphagia for a year. His general health was good. At the time of operation the tonsil was the size of a small hen's egg and presented an ulcerated faucial surface. It did not involve surrounding structures; reached almost to uvula. Caused great difficulty in swallowing and impeded breathing when he assumed a recumbent posture. Two previous efforts had been made by others to remove the growth. On these occasions general anesthesia was attempted. Each time he strangled so that operation was discontinued. I injected cocaine, 4 per cent., into the tonsil. Then securing the tonsil with tenaculum, threw a piano wire loop about the tonsil, circumscribing the gland completely, and with snare screwed down the loop as tightly as possible. I next passed a platinum wire loop around the tonsil and to the outer side of the cold wire already applied, and tightened it up also. Connecting it with the galvano-cautery, I cut off the gland. There was no bleeding, and patient made a prompt recovery. Now, after eleven years, he still lives and enjoys good health; has not had the slightest evidence of recurrence. Sections of that tonsil were made and the diagnosis of epithelioma confirmed.

The first case presents points of interest from diagnostic, pathologic and operative standpoints. It was called chronic tonsillitis by many physicians. The elasticity of the growth was mistaken for fluctuation and it was incised a number of times. The continued growth, the invasion of surrounding structures, and its course remaining uninfluenced by treatment, led Dr. Halsted to the diagnosis of malignant tumor. The possibility of its being gummatous indicated the administration of iodide of potassium. Forty-grain doses, given three times daily for a month, had no effect.

The fallacy of depending upon the microscopic examination of small fragments secured from superficial areas of a tumor is apparent in this case. Dr. Kieffer found nothing to warrant the diagnosis of malignancy in the small piece wired off, but he very promptly discovered the sarcomatous character of the growth on examination of the tumor after removal. While ordinarily we have no lymphatic implication in sarcoma, the secondary glandular involvement with sarcoma of the tonsil is not unusual. This has been noted in many other cases. An unusual condition was the apparently cheesy condition of one of the glands. Macroscopically it appeared to be tubercular. The microscope revealed its malignancy.

The advisability and choice of operation are really the most important questions before us. Butlin, in the work referred to, summarises his views as follows: 1. The prospect of permanent relief by operation is small, if indeed there be any. 2. Operation through the open mouth is not dangerous, but in no case has there been a cure—in several, temporary relief. 3. Removal through external pharyngotomy is a dangerous proceeding—has not yielded as good results as through the mouth and cannot be recommended on future cases.

If this were true, the outlook would be gloomy, indeed. The experience of the profession since the publication of Butlin's work, thirteen years ago, fails to justify these conclusions. Newman has taken pains to follow up the operated cases, and in the article referred to gives us the benefit of his labors. There have been a number of permanent recoveries. Since the publication of his article, Park, McBurney and others have reported cases outliving a period of two or more years without recurrence.

My case of epithelioma of the tonsil disproves Butlin's statement that no malignant tumor removed by the mouth has been permanently cured. This operation, I believe, should be restricted to such cases as may be positively limited to the tonsil. Where other structures are invaded, where secondary glandular disease is present, external pharyngotomy is much more certain to be radical.

In a number of cases there has been no local recurrence, but the disease has appeared at some remote point and has resulted fatally. In at least two instances, singularly enough, the recurrence was in the opposite tonsil. In one of Newman's the second tonsil showed the presence of sarcoma years after the removal of the first. In one treated by Macintyre the second tonsil became involved eight months after removal of the first, without the slightest evidence of recurrence at site of first operation.

A few words as to external pharyngotomy: There is no doubt that it is an operation of seriousness and magnitude. The time allotted me will not permit of a consideration of the questions of technique. I will, however, call attention to a few points brought out by my case.

The extensive glandular implication required my making a rectangular incision. A number of large veins, seen usually with sarcoma, complicated and delayed the procedure. The invasion of the suprahyoid region greatly extended the areas of disease and correspondingly increased the difficulties of the operation. The extreme dyspnea when the patient assumed the recumbent posture, especially when the fauces were relaxed by the anesthetic, left no choice as to whether a preliminary tracheotomy was to be performed or not. It simply had to be done if we were to proceed. The venous hemorrhage for a few minutes was very profuse, but ceased spontaneously. With the head kept in the dependent position it was not necessary to tampon the larynx. For a long time I made every effort to save the hypoglossal nerve, but finally had to abandon the attempt. The paralysis of the suprahyoid muscles and those of the tongue supplied by it has not been sufficiently marked to cause particular trouble.

I wish especially to call attention to the interdental splint devised by our dental surgeon, Dr. Dayan. Another time I should have the impression of the jaw taken before operation and the splint placed at the time. In our case the infection of the jaw led to bone necrosis and the exfoliation of some bone. The contraction of the jaw in consequence necessitated the making of a second splint. While the union is quite firm, it is still thought wise to have him wear the splint for a short time.

Every effort will be made to keep our patient under observation, that we may know of the ultimate course of the disease in his case.

At the conclusion of his paper, Dr. JACOBSON made the following remarks:

I present this patient to you. You have here the line of incision. You have the mark here, where the tracheotomy tube entered and scarcely left a scar. I don't know whether you can see the line of incision there. The glands were removed from here. You see how large they were. You see he is still wearing that little piece of splint, because the fibrous tissue is not quite as strong as we would like to have it, but he can use his jaw and chew with this splint, which is put into position. Of course, I understand that four months after removal of a malignant tumor is by no means indicative of a cure, and we will watch his case; and now that a few cases have been recorded in which a cure has taken place and where they have outlived the period of three years, we hope this will be the case here. This is, of course, one of the malignant cases. I believe that we are getting experience enough to say that we are warranted in this procedure, and that cases will not be allowed to die unoperated, as was the case with our late President Grant. I think you will all be interested in this case. This man certainly does not present an unhealthy appearance for one who has undergone such an operation.

SOME POINTS IN THE TOILET OF THE PERITONEUM.[1]

By CHARLES E. CONGDON, M. D., Buffalo, N. Y.

IN LISTENING to papers and discussions, I observe that many abdominal surgeons conclude their report of their cases as follows: After thoroughly washing or flushing the abdomen, proper drains inserted or the abdomen closed, until it has become a habit with some men to flush the abdomen for all sorts of reasons and for no reason at all.

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[1] Read at the thirty-third annual meeting of the Medical Association of Central New York, held at Rochester, N.Y., October 16, 1900.

The excuse given by some operators is to get rid of disorganised blood-clots; others to irrigate out the filth after every operation. Some believe there is an advantage in irrigation in pus formation; still others report cases of general septic peritonitis cured by irrigation or flushing the general peritoneal cavity. A few even eviscerate in order to more thoroughly execute this procedure.

Tait was a thorough believer in abdominal irrigation; he used, however, common tap water. I am inclined to think that today, perhaps, the large majority of operators are followers of Tait, with the exception that they use a normal sterile saline solution.

The advantages that are claimed for this procedure are in the direct line of cleanliness, hemostasis and stimulation; the disadvantages are a greater liability to infection from imperfectly sterilised solution or contamination in the manipulation, the amount of time consumed requiring a longer anesthesia, the liability to disseminate infection, the injury to the peritoneum from the solution being too hot or too cold, mechanical irritation from greater manipulation, and last, but not least, the absolute impossibility to render the peritoneum aseptic by washing, even though you eviscerate

Some surgeons are so wedded to irrigation that they honestly believe that their patients would succumb were they not thoroughly irrigated. I am frank to confess that I was one of this class, as I have even eviscerated in order to carry out this procedure in a more thorough manner. However, for the last year and a half I have not irrigated, scrubbed or flushed the peritoneal sac in part or in whole.

The following table will show the greater number of pus cases I have had during the last eighteen months: Twenty-two cases of tubo-ovarian abscess with pus in the pelvis; ten cases of appendicitis with ruptured appendix with pus in the pelvis, flank or both, six of them apparent or so-called general peritonitis; one case of cholecystitis, the abdomen full of sero-floculent material; two cases of ectopic gestation, the abdomen filled with blood-clots and greatly distended; one case of perforating ulcer of the stomach, with a collection of two ounces of pus; in this case there was resection of a portion of the stomach, the gall-bladder and appendix were in a mass of adhesions, a large stone was removed from the gall-bladder, the incision sutured, gall-bladder dropped and appendix removed.

In this series only one death has occurred, and that was in a case of appendicitis; the patient was moribund when placed on the table and should not have been operated upon. While I could readily bring elaborate reports of these cases, yet I do not wish to bore you.

The method which I have usually followed, is to make a small incision; if localised inflammatory condition exists, to wall it off with sterilised gauze, then thoroughly remove the pathologic condition present, leaving no stump or pedicle; absorb all purulent material with gauze, rubbing or irritating the peritoneum as little as possible, not even removing the plastic exudate, believing and trusting that the peritoneum in the immediate vicinity of the inflammatory process is immune and better capable of caring for itself when uninjured; being a firm believer in the bacteriologic causes of disease and remembering laboratory experiments, how feeble and nonvirulent pathogenic organisms develop, if developed at all, on old culture media, and yet how virulent they become if transferred to a different or fertile media.

This certainly answers one of the questions as to why we should disturb as little as possible tissues surrounding a localised abscess; I care not whether it be in the peritoneum or other organs or tissues of the body. How many of us have seen a pelvis full of pus, the patient so exhausted from the virulence of the infection and prolonged illness, that it seemed as though there was no chance, and yet a quick incision above or below, as seemed most suitable, not taking time for irrigation, for fear the patient would succumb on the table, a rapidly inserted drain, and find the patient on the following day nourishing well and inquiring when she could go home.

We occasionally meet with noncircumscribed collections of purulent material in the abdomen. The only reason that I can ascribe for its not becoming rapidly diffuse is that nature renders the peritoneum an unsuitable culture medium, or the nonvirulence of the infection, or both. These cases, although with a high temperature and rapid pulse, all yield by the complete removal of the exciting cause; small drains, no attempt to close the incision, that being left for a secondary operation. In some of these cases the entire abdomen appears to be filled with pus; the temptation to eviscerate and flush is very great.

These cases have readily yielded in my hands to the same treatment as in the last condition stated; formerly under the irrigation treatment many succumbed. I do not believe this to be a true general infection, but simply a puriform collection. In the true form of general peritonitis the prognosis is exceedingly grave, for patients rarely survive such an infection.

Injections of pure cultures of purulent material directly into the peritoneal cavity without injury to the peritoneum cause only temporary if any reaction, showing the wonderful power of the peritoneum to care for itself, and yet the uniformly fatal results, if combined with trauma, has led me to become perhaps too enthusiastic in the nonuse of irrigation. However this may be, I am inclined to believe that many more lives could be saved by not too radical but by more simple surgical procedures.

1034 JEFFERSON STREET.

ARGONIN IN GONORRHEA.

By NELSON W. WILSON, M. D.,
Pathologist at the Buffalo Hospital of the Sisters of Charity.

ONE often hears gonorrhea spoken of as a mere incident in the career of latter-day young men, the majority of whom appear to have not run the course of wild-oat-day pleasures unless they have been infected at least once. Some others boast of having had gonorrhea so many times that they don't mind it now at all; that it does not bother them any more than a cold in the head. We are all more or less familiar with these types; yet in spite of this popular and apparent disregard of the disease and its consequences, there is no complaint which is more difficult to properly cure and none which, when neglected or improperly treated, as it too often is, produces more distressing after-effects to the victim and those confiding females who may become their wives and eventually fall under the care of the gynecologist. The real difficulty of curing gonorrhea is evidenced by the numerous preparations put out to overcome the gonococcus, and while all may be more or less useful in various cases and at various periods in the course of the disease, there is no one which alone can be held up as an absolutely certain cure for gonorrhea. There is, however, one preparation which comes nearer to fulfilling all the requirements of an ideal treatment than any other, and this is the combination of casein and silver, known as argonin. In going over genito-urinary diseases I was struck by the great multiplicity of alleged cures and methods for gonorrhea which I found in text-books and read of in medical journals. About the only method I have not seen suggested for driving out the ever-busy gonococci is to blast them out with dynamite. You may wash, you may burn, you may drug if you will, but the biscuit-shaped bug will be with you still. I tried everything, honestly and conscientiously. I wanted to get the best possible treatment for the proper curing of gonorrhea and to that end I formed combinations of treatments. And, in order that I might be free and independent in my conclusions and utterly lacking in obligation, I purchased the material which I used. I must confess that when I took up argonin, it was with a feeling of scepticism, for I had read of really remarkable results following the use of "the sample you so kindly sent me." One report which seemed highly imaginative to me and which increased my scepticism, said that the discharge had absolutely ceased in three days. Such a gonorrheal miracle was startling to contemplate, to say the least; and with the doubt of an unbeliever I began the use of argonin. To give the results in dry Case I. and Case II. form would make prosy reading; hence they are grouped in narrative form. Altogether there were fifty-three mixed cases in which argonin was used alone or in combination.

The very first case which came under the argonin treatment was one of acute gonorrhea, with a discharge which had been free for four days. The symptoms were typical, and to avoid repetition let me add that in every case the gonococcus was found before the beginning of treatment. In this case I gave a 10 per cent. solution of argonin, to be injected twice a day with a blunt, urethral syringe of 15 cc. capacity, the injection to be retained ten minutes. In two days the patient returned with symptoms intensified and stated he was considerably worse. On inquiring how he used the syringe, he gave a demonstration. He went at his urethra as if he were chief engineer of an hydraulic pressure mining company. I reduced the strength of the injection to 5 per cent. and carefully instructed him in the use of the syringe. The second day he returned. The symptoms were slightly lessened, but he complained of the injection. I put him on alkalies, reduced the injection to 3 per cent., with orders to use it three times a day. The next visit showed marked improvement. The discharge was thin and the injection was absolutely painless. This was kept up for ten days, and then there were no painful symptoms of any character. The discharge was now scanty and very thin and colorless, and there were no gonococci found on repeated careful examinations. An astringent injection of zinc, witch hazel, hydrastis, boracic acid and water, used for a week, completed the cure. Other cases were treated variously in an experimental fashion, with argonin injections in combination with irrigations of potassium permanganate and alkalies; with methylene blue and alkalies; with methylene blue alone; with methylene blue and the permanganate irrigations, and in others the argonin injections have been the only treatment given. And the general conclusions drawn from the work done in the fifty-three argonin cases, is that argonin is by far the best thing to tie to in the treatment of gonorrhea, and if used with judgment will achieve really remarkable results. If a case is new—that is, if it is seen within forty-eight hours after the appearance of the discharge—argonin alone is a very satisfactory treatment, and in a majority of uncomplicated cases will effect a rapid and absolute cure in from four to fifteen days. In one case seen the day the discharge appeared, and in which the gonococcus was found, argonin injections alone caused the discharge to disappear on the fifth day. In this case a 2 per cent. solution was used in a 15 cc. syringe and retained ten minutes, four times a day.

In cases where the urinary symptoms were severe, the patient was given the alkaline treatment internally and the injections. I have found for urethral injections, that a 2 per cent. solution has been the most satisfactory strength, although I have used it as high as 5 per cent. in severe cases with excellent results.

The chief object to be attained, of course, is to get rid of the gonococcus as soon as possible with the least discomfort to the patient, and the sooner argonin is used the better. In some of the cases where nothing but argonin was used, chordee and painful urination disappeared in forty-eight hours. In the general run of cases the pus discharge became seromucous in from four to seven days. When this stage was reached, a single daily injection for from eighteen to twenty-one days completely cured the case. This does not mean that the discharge stopped in that time—that condition obtained much earlier—but the injections were kept up a sufficient length of time after the disappearance of every gonorrheal manifestation to insure permanency of the cure.

In subacute cases a 5 per cent. solution will be found to be much more satisfactory than the 2 per cent., which is the proper strength for acute cases.

In vulvo-vaginitis permanganate irrigations were very satisfactory, but they were slower than the argonin, which invariably produced the most brilliant results in a much shorter space of time. The strengths used were 5 per cent. and 10 per cent. for from three to five days, followed by reduction by degrees to 2 per cent. There were four cases treated and all were discharged cured on the twenty-third, twenty-ninth, thirty-first and nineteenth days respectively.

One case of ophthalmia is now under treatment with 3 per cent. argonin solution, using a medicine dropper, three times a day, and washing the lids with warm boracic acid frequently between times. Thus far eleven days have elapsed since the inauguration of the treatment, and splendid progress is being made without any involvement of the cornea. The results at present are apparently much more satisfactory than in the nitrate of silver treatment which was used in previous cases.

I do not believe that every case of gonorrhea which comes along can be absolutely cured by the use of any one agent, but with the proper internal treatment, the usual run of cases will succumb to an intelligent use of argonin as the only external agent used, and that a successful outcome will be achieved in a comparatively shorter time. It is hard to lay down a set course of treatment for gonorrhea, but argonin will be found to be the safest, the best and the most satisfactory. This conclusion is reached only after a careful study and use of all the gonorrheal remedies and by comparing them, one with the other and in all sorts of combinations, covering a period of experimentation of nearly two years.

Much depends on the preparation of the solution. If possible the surgeon should prepare it personally, unless he can send his prescription to a druggist whom he knows understands how to prepare it; and it should be dispensed in dark bottles. The most satisfactory method of preparing the solution is to first make a paste of the necessary amount of argonin powder, using hot water. To this paste add enough hot water to make the percentage solution required. This solution should be strained. Another very good method is to shake 1 part of argonin in 10 parts of cold water; add sufficient boiling water to make the desired quantity and shake until the argonin is in solution. Then strain.

Prepared either way and used properly and intelligently, argonin will produce remarkably satisfactory results in almost every case, and in some the outcome will be little short of miraculous. And when I say intelligently, I mean that the questions of hygiene, diet and alcohol must receive careful attention and the patient subjected to exact orders concerning them. With this always in mind and followed out and argonin used properly, cures will be effected which will seem as brilliant to the observer as satisfactory to the patient.

453 NIAGARA STREET.

GALVESTON has engaged Dr. Loper, a sanitary expert from New York, to superintend the putting of its streets into sanitary condition.

Clinical Report.

CASE OF PEDUNCULATED FIBROID REMOVED.

By L. G. HANLEY, M. D., Buffalo, N.-Y.,
Gynecologist Hospital of the Sisters of Charity.

Reported by C. CARR, M. D.

MISS R., aged 33; single; admitted to hospital November 3, 1900, suffering from pain attributed to a large swelling in the abdomen. Two weeks prior to admission, had been under care of a physician, who recommended operation.

Examination revealed a solid tumor in the pelvis, extending three inches above the umbilicus and lying to the right of the median line. Temperature 101½°; tumor immovable and extremely tender. Her bowels were constipated and she suffered occasional attacks of vomiting. There was an area seven inches in diameter that was very painful to touch over upper part of tumor.

Patient scientifically prepared and operation performed under rigid surgical cleanliness. On opening the abdomen the peritoneum, omentum and serosa of tumor were found to adhere firmly in a solid mass. Twelve inches of the ileum were agglutinated to tumor. The omentum was separated, which was found to be gangrenous in parts. Peritoneum showed the effects of severe inflammatory action. The omentum was separated and diseased parts removed.

The tumor was drawn up into abdominal opening and the bowel dissected from it, not, however, without leaving the serous covering where the bowel was attached adherent to bowel, thus avoiding any rupture or injury to the gut.

The specimen being freed, it was easy to see the cause of trouble, which proved to be a solid tumor with pedicle growing from the right cornu of the uterus. The pedicle, only one-quarter of an inch in diameter, was twisted and in a gangrenous condition. This was clamped and tumor removed.

It was necessary to make a wedge-shaped incision in the uterus, which was closed with catgut. The ovary on the left side was in a state of cystic degeneration, about the size of a small orange. This was removed. The abdominal cavity was filled with a normal saline solution and the wound closed. Peritoneum closed with catgut and the remaining tissues en masse with silkworm-gut.

Weight of tumor, eight pounds. The day following operation, morning temperature 99°, vomiting ceased. The sutures were removed on the thirteenth day, when union by adhesion had taken place. The patient made an uninterrupted recovery. Sat up on the twentieth day.

Society Proceedings.

BUFFALO ACADEMY OF MEDICINE.

Section on Surgery, October 2, 1900.

REPORTED BY FREDERICK H. MILLENER, M. D., Secretary.

THE second regular meeting of the Surgical section, for the season of 1900, was held on October 2d, thirty-two being present.

The minutes of the preceding meeting were read and approved.

The essayists of the evening were SYDNEY A. DUNHAM and HERMAN E. HAYD.

Dr. SYDNEY A. DUNHAM delivered a paper on

TRAUMATIC INSANITY.

The patient was born in 1858, in Germany. The father was killed by accident. His mother died at fifty-six years of age. His father had a sister insane. The patient was injured at the age of twenty-four. He was knocked down and remained unconscious for two hours. Next day he found a large sore spot on top of his head. He had been unable to work for the last two years, and has been attended by Dr. H. B. Brownell. On examining his head, a depression on the skull was found at the point of injury. He was sent to the Riverside Hospital and a bone removed of about one inch in diameter. He was there ten days and went home feeling well. He said his head felt lighter. He was only home a few days when, while sawing wood, he hit his head against a beam, and this was followed by delirium for two days. He rested in bed quietly and in a few days was apparently all right. Previous to the operation any sharp noises startled him. He would lose himself at church and could not remember anything stated at church. The children disturbed him at home and he was unable to saw wood straight. He was previously an experienced man with the saw. He moved his house back into the yard instead of towards the front, as he intended. He could not even take a glass of beer without losing himself.

In discussing the paper, Dr. H. B. BROWNELL stated: I have only a few words to say about this case of Mr. Abel's. I was called and found Mr. Abel in a greatly exhausted condition. He had come home a trifle late from his work, and had evidently stopped and taken a good deal of beer, as he appeared to me to be suffering from alcoholism. I gave him some bromide and had him go to bed. He was fairly comfortable next morning. I saw him occasionally during the next four weeks. I knew him at the time he had this accident a number of years ago and did not think that that accounted for any mental disturbance he might have. He always insisted upon having beer, and when not able to get it himself would send out for it, until I told him it was impossible for him to get well if he took it. His wife pestered him a good deal, and at the time I thought that had something to do with it. He had some delusions that he was being persecuted or pursued by some one, and I thought the best place for him was an asylum. He complained at different times of pains in his head, and, as I remember, his pain was more to the base and over the side of the injury, although I may be a little mistaken about that, as it never occurred to me at that time that his trouble might be due to his accident. Since this man has been trephined he has been quite well; therefore, I am forced to the conclusion that the accident was the cause of his trouble.

Dr. **Herman E. Hayd** presented a paper on

TREATMENT OF CHOLELITHIASIS.

He divided the treatment into three divisions: (1) the prevention of cholelithic condition; (2) the relief of an attack of gallstone colic; (3) the emptying of the gall-bladder and ducts of their stones. First is met by encouraging outdoor, active life, moderation in food and alcoholic drinks, massage and hot baths daily and free bowel movement, the lessening of any constriction and abdominal viscera by corsets, tight waists, or belts and the like. It is also stated on good authority that the very free use of starches and non-nitrogenous foods encourage the tendency to the formation of gallstones by lessening the amount of bile acids in the bile, and for that reason a meat diet has been suggested. During an attack of colic, the pain must be met by hypodermic injections of morphia or even inhalations of chloroform; the application of a large hot poultice of linseed meal to the abdomen over the liver areas; a prolonged hot bath, which sometimes relieves the muscular and nervous system to such an extent as to favor the exit of the stone, and if shock and collapse be profound, such remedies as would be naturally indicated.

When stones have forced an exit in the gall-bladder or ducts there is no medicine which causes their absorption or liquefaction. It is perhaps true, however, that a course at Carlsbad or the regular use of aperient waters might help their discharge into the bowel, first by relieving associated congestion and catarrh and, perhaps, by helping on the bile current. It is in this way that an explanation can be found for the apparent good of the olive oil treatment, because there can be no doubt, in my mind, that relief has come from its prolonged administration. Not by a saponifying and dissolving stones, but by antagonising and soothing catarrhal processes. So, with patients who go to the various spas and springs in Germany, after a few days' sojourn, they begin to pass stones, and this fact can only be explained upon the supposition that the onward flow of the bile is stimulated and the catarrhal ducts are rendered less sensitive and more patulous. However, when the gall-bladder, or the ducts, is the seat of the stones, which are not being gotten rid of, and are causing much pain and irritation, a surgical operation is indicated.

Dr. Dunham's paper was discussed by Drs. Frost, Matzinger, Fell and Eugene A. Smith.

Dr. FROST described several cases which had come under his observation at the State Hospital, and reported one case which had not been particularly benefited by operation.

Dr. MATZINGER called attention to a case of traumatic insanity, the wife of one of the employees of the hospital. She was suffering from chronic mania following confinement. She was relieved after an operation.

Dr. FELL described a case which had come under his observation, where a patient had fallen out of a street car on Elmwood avenue and North street, and considered that there might possibly be a bone pressing on the brain.

Dr. EUGENE A. SMITH described a man at the General Hospital, who was struck on the side of the head while passing a bridge on a canal boat. He stated that if ever anybody was generously trephined, he was. A greater portion of the parietal and a considerable part of the frontal bone was removed. He was insane and is in the hospital now.

Dr. Hayd's paper was discussed by Drs. Thoma, Eugene A. Smith and Colton.

Dr. EUGENE A. SMITH said: I find both papers interesting. I do not care to go over the ground that Dr. Hayd went over as to discussion, although I wish to add that infection is usually the cause of formation of stones in the gall-bladder.

Dr. COLTON described a case which he had been called to and had operated upon.

Dr. THOMA stated that gallstone is very common. There are many times when the patient will not be operated upon, and also that he frequently removed them by giving olive oil. He believed, however, that cases of undoubted gallstone ought to be operated upon.

The meeting adjourned at 11 p. m.

Section on Medicine, November 13, 1900.

REPORTED BY JULIUS ULLMAN, M. D., Secretary.

The second regular meeting of the Section on Medicine of the Buffalo Academy of Medicine, for the season, was held in the Library building, Tuesday evening, November 13, 1900, the chairman, Dr. ELI H. LONG, presiding.

Dr. WILLIAM C. KRAUSS read a report of a case of

ASTHENIC BULBAR PARALYSIS

occurring in a man 55 years of age, who had up to a year ago enjoyed the best of health. Habits, with exception of a period of five years, when he was engaged in politics, good. About a year ago he began to notice difficulty in swallowing, occurring especially when he was fatigued or under nervous excitement. Then gradually the speech became labored and heavy; especially difficult was it to pronounce the labials. The lips would draw up so that he could not grasp the cup in taking food. With these symptoms there followed a paretic condition of the whole muscular system. The face muscles were slow,. responded tardily, the left eyelid was markedly paretic, lagophthalmos was present at night, could not masticate solid food, jaw felt heavy, difficulty in walking, hands and arms were perceptibly weakened. Choking spells set in so that his life was despaired of, and he was given the blandest form of liquid foods.

Examination revealed a man of strong physique, large skeleton, 5 feet 7 inches in height, former weight 236 pounds, present weight 140 pounds; face stolid, expressionless, with ptosis of left eyelid, atony of facial muscles, thin retracted lips, tongue does not extend beyond the inner margin of the lips and not atrophied, palate immovable but hanging in the middle line, inability to pucker the lips or inflate the buccal cavity; throat shows nothing abnormal, except some retraction of the left vocal chord after exercise; sensation of face and body unimpaired; muscles soft and flabby; tendon reflexes somewhat diminished; no disturbances of the rectal or vesical reflexes; urine normal. Pulse at times weak and lowered.

Treatment consists of liquid diet, strychnine, galvanism to the head and neck and general faradisation. Improvement has apparently taken place, as he is able to speak and swallow much better, is stronger on his feet and has more control over his hands. This improvement is doubtless only temporary and prognosis is considered unfavorable.

Dr. **Fridolin M. Thoma** showed a boy eight years of age with a history that he was slow to walk and that he slid about until two years of age. There was also a rapid closure of the fontanelles. There is an absence of knee-jerks, a weakness of muscular power in the lower extremities and a pseudo-hypertrophy of the muscles of the calf of the leg. The boy rises from the ground in the characteristic manner as described by Gowers, and gives a very interesting symptom complex of pseudo-hypertrophic muscular paralysis.

A REVIEW OF THE MODERN MEDICAL AND SURGICAL TREATMENT OF EPILEPSY,

was the title of a paper read by Dr. **L. Pierce Clark**, physician at the Craig Colony of Epileptics at Sonyea, N. Y. The substance of Dr. Clark's instructive paper may be appropriately given in his general conclusions. He arranges the present status of trephining as follows: 1. Idiopathic epileptics with typical grand mal seizures should never be trephined. 2. Idiopathics, in whom seizures are of the Jacksonian type, should only be trephined when infantile palsies can be excluded and when the family and personal degeneracy is at a minimum; even then but a fraction of 1 per cent. of this class recover. If these cases are operated upon, a very thorough removal of the epileptogenic area should be made and we should expect a more or less permanent paresis, according to the extent and the thoroughness of the cortical removed. 3. Traumatic epileptics should be trephined only when the injury is definitely proven and stand in direct causal relation, has existed not more than two years, and in the absence of a neurotic family history. The earlier trephining is resorted to after convulsions begin, the better the prognosis. The remnants of palsy lesions in infancy must be carefully excluded. If these rules are followed, many less so-called traumatic cases will be trephined, but the result will far exceed 4 per cent. of recoveries. All epileptics trephined from whatever cause must be given post-operative bromide treatment for years.

The present status of medical treatment is as follows: 1. By a combination of diet, regular occupation and personal hygiene, the bromides gain for us the best results in treating idiopathic epilepsy. 2. The bromides, singly or combined, still hold a very important place in epileptic treatment and still remain our chief sedative for the epileptic state: in the young epileptic, to secure a possible entire suppression of attacks and ultimate cure of the disease; in the adult, an amelioration of the frequent paroxysms. 3. The bromides, to be effective in chronic and long standing cases, must be given in large daily doses to suppress convulsions—from 300 to 400 grains, if necessary. They should be given gradually to find the sedative level, to which level it is the physician's chief duty to maintain them with physical and mental comfort to the patient. 4. Hot and cold baths, high enemas, alimentary antisepsis and massage are absolutely essential to successful bromide medication. 5. Bromine is a worthy substitute to the bromides in many cases when the latter are contraindicated or cannot be given in high dosage. 6. Salt starvation or semi-salt starvation is a great adjuvant to the bromide treatment and should be thoroughly tried in all cases where bromides are apparently contraindicated before the salt is discarded.

PARESIS AND CEREBRAL SYPHILIS.

Dr. ARTHUR W. HURD, superintendent of the Buffalo State Hospital, read an article with the above-named title. The type of disease which has been called pseudo-paresis and the resemblance between paresis and cerebral syphilis, including the points of differential diagnosis, as well as the points of marked resemblance, were first considered.

He described the origin, onset and duration of the two conditions, raising the question of the possibility of an as yet unrecognised toxin of syphilis acting in cases of paresis, which appear five to twenty years after infection, as compared with the specific virus as ordinarily seen. He considered the importance of differential diagnosis and reviewed briefly the work of Dr. Mott, pathologist of the London County Asylums, as to the pathological process which goes on in paresis of specific origin involving his theory of the lowered specific vital energy of the cells and neuron degeneration under the influence of stress, primarily a degeneration of the neuron with secondary changes in the membranes and vessels in consequence of irritation from the products of degeneration.

The paper pointed out and described briefly the somewhat rare manifestations of a pure cerebritic, or of a meningo-cephalitic, pursuing an unexpected and low febrile course of comparatively brief duration; also some of the causes of sudden death in paresis and cerebral syphilis, such as thrombi of the larger arteries, giving illustrative cases. He also spoke of the influence of trauma in hastening or developing paresis and cerebral syphilis and the danger of confounding cause and effect. Several cases were detailed in which accidents, wounds and the like, had been the means by which latent paresis or cerebral syphilis had been brought to notice and pushed forward into rapid development. The effect of previous attacks of simple insanities in paving the way for subsequent paresis was also treated.

DISCUSSION.

Dr. **James W. Putnam**, in the discussion of Dr. Clark's paper, stated that medically it was wrong to treat epilepsy pure, but that the man must be treated. Attention must be given to every physiological function. The patient must be built up. Attention must be given to tissue metabolism, and toxemia from the alimentary tract must be prevented.

As to the high dosage of bromides, it cannot so well be accomplished in private practice as in an institution such as Craig Colony. He urges the use of strontium bromides and advises its use. Other drugs not so beneficial were also alluded to. He further stated that a man with but two attacks of seizures in a year would not go to Craig Colony. This is the class of patients who want to be treated methodically with bromides, and they will not tolerate the large doses of bromides. If bromides don't agree, he uses acetanilid. Prosseau's treatment of atropine or belladonna was also mentioned.

As to the surgical treatment, he takes much the same position as that in the paper, but does not discourage trephining if it shows amelioration of attacks and an increase in the intermissions between the attacks. One should not determine the value of operative procedure by absolute cure, but by an amelioration of the symptoms.

Dr. **Herman Mynter** agrees with Dr. Putnam that the amelioration of symptoms and length of intermissions between seizures defends the operative measures. He operates, but rarely sees a perfect cure; further, he does not know how many years is to be counted before a case can be said to be free from seizures and therefore cured.

A case was detailed where years after the injury the patient was found in a condition of status epilepticus. An operation was performed without the use of an anesthetic and the depressed bone removed. The symptoms disappeared for three years, when again he was called and found the patient in status epilepticus. The patient was operated upon again, more bone being removed and any adhesions which may have formed. After three years he again saw the patient. At this time the seizure was a "petit mal," for which he again operated, since which, so far as is known, the patient is well. Dr. Mynter asked whether this could be considered as a cure. He also mentioned another case operated upon, when the trephined piece of bone showed on its inner surface a spicula of bone which undoubtedly entered the brain substance. It is needless to add that in all his cases he uses the post-operative treatment of bromides.

Dr. **Edward J. Meyer** submitted a portion of trephined bone, which showed upon the inner surface a spicula of bone which penetrated the brain cortex. It resembles very much the case just mentioned by Dr. Mynter. The case recovered and there has been no attack since the operation. Dr. Meyer also has operated for epilepsy, following the Jannesco method, with a result in the amelioration of symptoms. During a recent visit to Europe he saw Kocher, of Bern, operate for epilepsy, and says that Kocher does not discourage operation on idiopathic cases. In these cases adhesion of the dura are found and gold foil is used. Kocher also drains these cases and overcome cerebral pressure by means of an especially devised silver tube, which Dr. Meyer showed. Kocher drains both sides and even the occipital region.

Dr. **Herman G. Matzinger**, in discussing Dr. Hurd's paper, first alluded to the Justus test. It is claimed to be of great value in recent and untreated cases of syphilis. A number of cases of primary syphilis sent to him by Dr. Grover Wende gave a positive test, but as this test is dependent on the hemoglobin percentage, and further, as the normal hemoglobin percentage varies from 12 to 20 per cent. according to the Fleischl instrument and other methods, the Justus test cannot be regarded as very reliable.

In regard to syphilis and paresis, Dr. Matzinger mentioned the valuable original work of Straub, of Munich, who found in the ascending and descending arch of the aorta, in 82 out of 89 cases of paresis examined by him, atheromatous changes. He found irregular nodular elevations, which were more marked near the semilunar valves, and the free edges of the leaflets of the valves showed like abnormalities. Similar changes occurring in the vessels of the brain may prove that the phenomena of paresis may be those of starvation.

Dr. **Allen A. Jones** reported a case of epilepsy following a fall down stairs, and asks of the essayist the line of treatment. There was no scar or depression of the head. Is this to be regarded as an idiopathic or traumatic epilepsy? Should bromides be given and are the reflexes, if any, to be corrected?

Dr. **William C. Phelps** said that in his experience it is a good idea to drain in the operative procedure on an epileptic, and stated a case where, not having the Kocher tube, further not being able to get the tube shown by Dr. Meyer, he used strands of catgut for drainage with a cessation of the convulsive seizures. He believed much improvement can be looked for by using drainage.

Dr. **William C. Krauss** stated that the case of bulbar paralysis related by Dr. Mynter was a true bulbar paralysis, but his case was the asthenic form, of which but six cases are recorded in the United States. Referring to the case of status epilepticus briefly reported by Dr. Mynter, where so many operations were required, the patient is now free from epileptic seizures. He referred to a reflex case of epilepsy following an extensive burn, which was treated with potassium bromides with good effect. The Craig Colony at Sonyea is a great boon in the management of epileptics, the regular life, hygiene and healthful occupation is excellent, and compared to it the home treatment, which is a failure.

Dr. Hurd's paper is of great interest from a medico-legal view. He described a legal case where a man was struck and died. His assailant was tried and convicted of manslaughter, receiving fourteen years imprisonment. The autopsy showed a rupture of the basilar artery, which was syphilitic. In his opinion there should be a pardon for the prisoner.

Dr. **L. Pierce Clark**, in conclusion, does not wish it understood that he uses the bromides exclusively; other drugs in individual cases do good. He did not mention the other remedies used in epilepsy, as he desired not to make his paper too long and wished it to conform to the fifteen minute time limit.

Von Bergmann discredits the Kocher method of operation in epilepsy, and many other observers deny an intracranial pressure in idiopathic epilepsy. Kocher's results will be found to result from the breaking up of any possible adhesions and in the relief of intracranial pressure, which necessarily follows operation.

As to Dr. Jones's case, Dr. Clark advises the relief of any possible reflex phenomena and the use of mild sedatives. The traumatic cases of epilepsy should be operated if necessary, but it must be remembered that an operation performed upon any part of the anatomy of an epileptic will often produce diminution or complete cessation of attacks for a year or more. Dr. Clark was at first quite sceptical in the pochlorisation, *i. e.*, reduction of salt in the treatment of epilepsy and began this method of treatment with some reluctance, but is surprised that amelioration has followed the employment of this method. It is best suited to the chronic cases with frequent attacks.

On motion of Dr. JULIUS ULLMAN, seconded by Dr. William C. Krauss, a vote of thanks was extended to Dr. L. Pierce Clark for coming to Buffalo and presenting before the Academy his valuable paper.

Members in attendance, 84. Adjourned, 11.30 p. m.

Section on Ophthalmology, Otology, Rhinology and Laryngology, November 19, 1900.

REPORTED BY GEORGE F. COTT, M. D., Secretary.

The third meeting of the section of Ophthalmology, Otology, Rhinology and Laryngology for the season was held November 19, 1900.

The chairman being temporarily absent, Dr. J. W. GROSVENOR was selected as temporary chairman. Minutes of the previous meeting were then read and approved. During the reading Dr. FRANK WHITEHILL HINKEL arrived and took the chair.

Dr. GEORGE F. COTT exhibited a patient, aged 17, from whom he had removed the entire thyroid gland, which was pressing on the trachea laterally, thus causing suffocation. Tracheotomy was first done and a soft catheter passed beyond the portion pressed upon. After twenty-four hours the operation was performed with the assistance of Drs. King, Sage and Bingham. The boy made a good recovery except that he had a partial paralysis of both cords for several weeks.

DISCUSSION.

Dr. J. W. GROSVENOR: Thirty years or more ago Dr. Warren Greene, of Portland, Maine, had performed the operation of thyroidectomy many times, for the arrest of venous hemorrhage. It was his custom to tie the veins with silk ligatures. Whenever a vein bled freely, it was tied as soon as cut. It was the universal belief of the surgeons of his day that the ligature of the veins would almost certainly cause phlebitis or produce some injurious effects upon surgical wounds. Dr. Greene was a pioneer in his method of arresting venous hemorrhage. He was a very successful operator in the extirpation of the thyroid gland.

Dr. **Herman Mynter** thought it impossible to make a total extirpation of the thyroid gland through a median incision and that the tumor removed must have been a hypertrophied middle lobe. He described the differences between excision of the thyroid and enucleation of other growths in the thyroid gland. The difficulty in excision depended upon finding the proper spot. By an oblique or transverse incision layer after layer is cut till the proper capsule is reached. We reach then only capillary vessels, the gland shells out with ease and little bleeding, while, on the other hand, if we try to excise the gland before reaching the capsule the bleeding from the thin-walled veins may be formidable.

Dr. **E. E. Blaauw** asked what the previous treatment had been. He thought that it was a case of parenchymatous degeneration and that early treatment with thyroid extract might have prevented the condition. He had seen quite a number of cases of enlarged thyroids which yielded readily to the extract. One case of special interest was a lady, aged 20, who noticed a swelling about the neck, progressing rapidly during the last six months. She had occasional choking spells. Specific treatment relieved her within two weeks.

In closing, Dr. **George F. Cott** said: To Dr. Mynter I would say that the gland was entirely extirpated, as the specimen shows; that it was done through the median incision. In answer to the question of Dr. Blaauw, I know nothing about the previous treatment, as the patient was under the care of another physician and I first saw him on the day tracheotomy was done.

Then followed a discussion on

LARYNGEAL TUBERCULOSIS.

Dr. **DeLancey Rochester**: Laryngeal tuberculosis as a primary disease occurs occasionally, but probably complicates about 30 per cent. of all cases of pulmonary tuberculosis. What causes the laryngeal complication is undetermined. An existing catarrhal laryngitis and the causes determining its occurrence would predispose to the development of tubercular disease in one already suffering from tuberculosis of the lungs. Overuse of the voice, especially under unhygienic conditions, *e. g.* in raw, damp or smoky atmosphere, the abuse of alcohol and the like. But professional vocalists, if they neglect themselves, are more liable to the disease than others. Men are more susceptible than women. The disease usually mainfests itself first in the interarytenoid space, or upon the arytenoid bodies themselves. It may begin anywhere and none of the structure is safe from attack. There is usually a marked pallor of the pharynx and larynx for a period varying from a few days to a week or two before actual lesions show themselves. Finally the changes that occur are swelling of the submucous and mucosa, passing rapidly to ulceration, which may extend to the cartilages, producing perichondritis and chondritis with extensive necrosis and destruction of the parts.

One of the early symptoms of the involvement of the larynx is a feeling of tire in attempting to continue conversation and then inducing cough by talking; then a distinct huskiness, which gradually changes to a true hoarseness, often, finally, to complete loss of voice. The cough is most distressing and often brings on vomiting. If the epiglottis is involved, or the ulceration extends to the pharynx, as it often does, a most distressing dysphagia develops,—distressing from the pain experienced when attempting to swallow and from violent attacks of coughing that are brought on by the attempts to swallow.

Prognostically, there are some cases seen early when there is but little pulmonary involvement, which under judicial local and general treatment recover; but usually the development of laryngeal tuberculosis in a pulmonary case is a bad prognostic factor. I have had cases with infiltration in both lungs and cavities in one recover; but in my own experience I have never known a case of pulmonary tuberculosis develop laryngeal tuberculosis and recover. So, when a case develops hoarseness, I redouble my efforts in treating the laryngeal involvement.

I will take a few minutes to state briefly the steps taken to accomplish this purpose. If the case is on a specific treatment, I increase the dose rather more rapidly than I ordinarily would. I use cleansing laryngeal sprays and insist on continuous inhalations and instruct the patient to cough as little as possible. I also immediately see to it that the nose is thoroughly cleansed daily and put in such a shape that it can perform its proper breathing function. As regards treatment, I will only state that I have had best results with Vaughn's nuclein and creosote. I will leave the subject of local treatment with those who are to follow.

Dr. E. L. **Shurly**, of Detroit (by invitation): The preceding speaker has touched upon nearly all the salient points of this troublesome and unsettled disease. Treating it from a theoretical standpoint in its relation to general tuberculosis and in regard to its etiology, we might be satisfied by accepting the doctrine of bacilliary origin; yet, as the disease comes under our observation, laryngeal tuberculosis or phthisis brings to the physician many vexatious questions. There is no doubt that primary tuberculosis is probably due to direct infection by tubercle bacilli. But, as clinicians, we must remember that there are certain diseases of this nature characterised by some antecedent degeneration. Therefore, according to the older observers, we may have mixed several diseases under the one name, tuberculosis. On this point, however, there is much difference of opinion. There are conditions both primary and secondary, which must be considered, whether one recognises or not the existence of primary laryngeal tuberculosis.

Statistics regarding laryngeal phthisis are not always reliable. In fact, we have often to "shave them," as bankers say. This is not only true of medical statistics, but of the sciences generally. For instance, we usually harbor three kinds of belief, generally speaking: first, a belief based upon facts; second, upon circumstantial evidence; third, upon pure metaphysical thought, speculation and assumption. An example of belief based upon circumstantial evidence may be drawn from the following case:

A medical friend of mine brought to me a young girl supposed to be suffering with primary laryngeal tuberculosis without involvement of the lungs. The girl was in a good state of nutrition; good family history; had been taking vocal lessons, which the teacher urged her to continue until her throat gave so much trouble that she had to desist. Upon examination, I found a little rise of temperature; no tubercle bacilli in the sputum; moderate swelling of the arytenoids and posterior wall of the larynx; the vocal cords thickened and some enlarged glands in the laryngeal ventricle. The girl seemed to be in good general condition, excepting for the suspiciously frequent pulse. I could find no lesion of lungs by auscultation, percussion and *x*-ray examination; yet she died after a four months course of illness. The post-mortem showed extensive pulmonary infiltration,—an acute general tuberculosis. If it were not for the post-mortem examination in that case, it would no doubt have been always called a case of primary laryngeal tuberculosis, when, as events showed, the lungs were very much involved in the beginning.

It is not common to meet with cases of chronic laryngitis with erosions, and to mistake that condition for tuberculosis. Even though tubercular bacilli may be found, I doubt whether such cases are really tuberculosis. There is only about 13 per cent. of real laryngeal tuberculosis where the lung is involved (pulmonary phthisis), and yet there is every facility in all such cases for infection of the larynx, while really very few become affected. I have repeatedly tried to produce laryngeal tuberculosis in monkeys, but have never yet succeeded, although I have anesthetised the monkey, scarified the laryngeal vestibule and pharynx, and applied either moist or dried sputum. Still such experiments cannot be compared with the conditions surrounding the human being. Therefore, I believe statistics are unreliable and often unfair and valueless for determining the exact origin and nature of laryngeal phthisis.

It is stated that tubercle bacilli have been known to penetrate unbroken mucous membrane. I doubt it! Another clinical aspect is presented in the two types of the disease; for instance, those cases showing hyperemia for a month or more before ulceration, and others showing anemia with or without great swelling. I have myself made the blunder of mistaking a case with great swelling for one of sarcoma or carcinoma. There are all sorts of variation in clinical aspects for which we are not able to account. If it is a fact that bacteria are the sole cause of laryngeal phthisis, we ought to have 90 instead of 13 or 20 per cent. of laryngeal involvement. Alcohol is supposed to be an exciting cause, yet very few chronic alcoholics have the disease. Excessive or bad vocalisation, especially with persons who do not naturally possess a suitable larynx, ought to be a common exciting cause, yet we do not find it so in practice.

In the Michigan forests we formerly met many lumbermen suffering from chronic laryngeal catarrh, yet very few of these cases became laryngeal or pulmonary tuberculosis, although they were constantly exposed to the wind and weather. Regarding treatment, it may be said that some treatment is necessary to neutralise sepsis in all advanced cases. There are cases which show no tubercular bacilli in the sputum at an early stage, but which go right on to general tuberculosis, and others which show the tubercle bacilli early that may go on to cicatrisation. For the local treatment, according to my experience, iodoform is the best agent where any abrasion exists, but this drug avails nothing if no abrasion or ulceration is present. Tannic acid with carbolic acid, tricresol, or the essential oils are useful. Cocaine or morphine used in moderation will relieve odonphagia better than anything.

I have tried tracheotomy in a few cases. One patient was benefited very much, but the others were not. The wounds became very sore from coughing, and there was great inability to expectorate effectually through either the tube or the mouth. I have abandoned this operation altogether in laryngeal phthisis. Regarding inhalations, I believe they do more harm than good in many instances by unduly exercising the parts. The use of some antiseptic which may be evaporated in the bed room at night is often highly beneficial. The real disinfection of the secretions of the larynx and trachea is a questionable accomplishment. Inhalations, however, may be of advantage when properly used in selected cases.

Dr. Shurly, in concluding his remarks, spoke of the advantages of different places for their climatic effects.

Dr. JOHN H. PRYOR: Whether tuberculosis of the larynx precedes tuberculosis of the lungs or occurs without any associated pulmonary disease of like character, are questions which have been much discussed in literature. Opinions are divided between clinicians and pathologists. Personally, I am inclined to accept the view of the pathologist that they are practically always associated and that cases in which laryngeal tuberculosis is present without any involvement of the lungs are so rare that we may conclude in almost every instance that the pulmonary lesions are not sufficiently advanced to produce evidence or are overlooked. I have seen cases of tubercular laryngitis in which prominent specialists said that no pulmonary disease was present, but I always found the signs of pulmonary tuberculosis. Often percussion and auscultation are improperly employed and the region of the neck over the apices is slighted. The toxemic symptoms due to laryngeal affection are confusing. Our attention may not be directed to the lung until late because they are ascribed entirely to the infection at one point. Laryngeal tuberculosis occurring early or late with consumption of the lungs is rare in this vicinity,—more rare, in my opinion, than statistics gathered elsewhere would lead us to believe.

An early diagnosis is not such an easy matter as the text-books say. We may have hyperemia and a catarrhal condition as well as the anemia and swelling mentioned. Furthermore, the appearance of anemia and puffiness may be only symptomatic, as the Germans have pointed out, of a general anemic condition characteristic of incipient and pulmonary tuberculosis, as one of the signs of that disease due to toxemia. The disease may be limited to a central portion of the lung and the physical signs delayed. There are reasons for doubting the claim that ulceration of the larynx is principally due to infection from the expectoration passing over a denuded or abraded mucous membrane. We find tubercular laryngitis before there is any elimination of bacilli from the lung, and there is in almost every case of pulmonary tuberculosis catarrhal inflammation, congestion and abrasion of the laryngeal membrane. If this source of infection is as great as has been asserted, certainly the larynx would be affected in a large per cent. of cases.

We are led to the conclusion that there may be other methods of infection, and this may occur through the bloodvessels and lymph channels. This would also account for the involvement of the deeper submucous tissue, which appears sometimes to be the seat of the primary lesion. The most important thing we have learned recently in connection with this subject is the curability of laryngeal tuberculosis. During the last three years I have seen two cases of complete recovery, after a very unfavorable prognosis had been given by men of large reputation and skill. It is occasionally surprising how completely the damage from exudation and ulceration is repaired. Complete aphasia and inability to swallow in the cases mentioned were followed by the entire return of function.

The treatment should not be climatic or local but both; together they promise results which either one cannot accomplish. This fact has been learned in the Adirondacks and at Liberty, Sullivan county, and today one who can afford proper treatment has a better chance. In diagnosticating incipient tuberculosis, either of the larynx or lung, we are prone to forget that the well marked case usually seen is no longer tuberculosis, but a condition of mixed infection and a complex symptom group generally called consumption. True tuberculosis is a very different disease and its diagnosis, treatment and prognosis all depend upon the ability to recognise it. Any discussion of the local treatment of laryngeal tuberculosis seems to me to be beyond the range of the topic under consideration.

Dr. CHARLES CARY said his main object in speaking was to put in a good word for the larynx, which certainly is the great friend of all physicians and the mainstay for some. He thought the vulnerability of the larynx to tuberculosis was but slight when one considers the degree to which it is exposed to infection both from without and from "bathing" from within in pulmonary tuberculosis. His views fully coincided with those of Dr. Pryor, that it was a late manifestation in advanced phthisis, that it was not as common, in his experience, as authorities would lead him to expect, that it was curable only in those cases where the pulmonary symptoms subsided; but that he could not believe that Dr. Pryor's views were correct when he stated that laryngeal affection took place through the lymphatics as blood-channels, as the infection would have to float against the stream to reach the larynx from the lungs.

Dr. Cary then gave a brief description of the pulmonary and laryngeal lymphatic chain to substantiate his statement, and closed by calling in question the validity of Dr. Shurly's experiment on monkeys when he insufflated the tubercular virus on excoriated surfaces. He said he did not know the resistance that the tubercle bacillus had to ether or chloroform vapor, but he thought the monkeys under ether would receive only attenuated virus if, as Dr. Shurly said, these experiments had been carried on under an anesthetic.

Dr. E. E. Blaauw.—I wish to state that I do not agree with Dr. Cary. We must accept a propagation of the disease against the lymph current. We see too often a one-sided tuberculous affection in the larynx corresponding to the localisation of the tubercular process in the lung on the same side, and when the last one is that which is primarily affected. Now, this is not so remarkable because we often find in carcinoma of the liver or stomach supraclavicular involvement of the lymphatic glands. In carcinoma of the breast, the involvement of the glands of the armpit can only be explained by the fact that the disease has beeen propagated against the lymph current.

In tuberculous cases we should not only look for anemia of the pharynx and larynx, as the previous speaker intimated, but also at the hard palate, a locality open to every observer. The high percentage of tuberculous larynges that the pathologists find must be explained in part by the fact that all abnormalities found on the post-mortem table are called tuberculous, while many of them developed only in the last days of life and others are not specific whatever.

As enlarged tonsils and adenoids may be a portal of entry, we should remove them, which will go a great way toward prevention, because proper inhalation through the nose will then be obtained, and one of the many disadvantages of mouth-breathing cut short. Another not insignificant one is improper development of the chest and therefore predisposition toward the development of tuberculosis pulmonum. Here the duty of the family physician shows itself clearly. Fellows present, 56.

Section on Obstetrics and Gynecology, November 27, 1900.

Reported by WM. G. RING, M. D., Secretary.

The regular monthly meeting of this section was held at the Academy rooms Tuesday evening, November 27, 1900.

The meeting was called to order at 8.45 p.m. by the chairman, Dr. A. J. COLTON.

The minutes of the previous meeting were read and approved.

Dr. HERMAN E. HAYD reported four cases of abdominal hysterectomy, operated on by him during the past week, giving the details of each case and showing the specimens.

Dr. WM. R. STONE, of New York City, read a paper entitled, Cocainisation of the Spinal Cord by Means of Lumbar Puncture in Labor.

European physicians in giving the details of the operation of lumbar puncture entirely overlook the American literature on the subject. Dr. Corning discovered the method and published his ideas over fifteen years ago. Medullary anesthesia lasts from thirty minutes to four and one half hours; uterine contractions are not interfered with.

The skin area in which lumbar puncture is to be made should be thoroughly cleansed and disinfected. The syringe should be of the solid piston type; the needle should be 9 c.m. long and of short beveled point. The puncture is made between the third and fourth lumbar vertebra, from below upward, the patient being in the so-called scorchers position, or in an exaggerated Sims's position.

When the needle is in spinal canal withdraw a few drops of the spinal fluid in order to be certain that the canal has been penetrated. Use ten minims of a 2 per cent. solution of cocaine, or 1-6 of a grain solution, to be in a two dram vial and boiled therein in boiling water for ten minutes. This method does not change cocaine, chemists to the contrary notwithstanding. A spray of ethyl chloride may be used at point of puncture to anesthetise the skin.

Dangers: (1) Introduction of pathogenic germs; (2) Personal idiosyncrasy of the patient to the effects of cocaine, which may be avoided by repeated small injections; (3) Piercing spinal cord; this is usually not followed by bad results. Wait until cervix uteri is thin and dilatable and pain in back is severe. Anesthesia takes place in from two to twelve minutes.

Effects of injection: Spasm in the parts is done away with. Tingling and coldness in lower extremities; vomiting; numbing of pains to a mere pin prick; in fifteen minutes patient is pain free.

The headache which usually follows three hours after the injection may be controlled by hypodermic injection of morphine, or 1-50 of a grain of glonoin. Hyoscine hydrobromate, 1-150–1-200 grain, given hypodermatically before puncture is made prevents both vomiting and headache.

After delivery the temperature rises from 101 to 103° Fahrenheit; after sixteen hours it falls to normal. Pulse is little accelerated. Experiments with other drugs give the same results minus anesthesia.

DISCUSSION.

Dr. **Marcel Hartwig** mentioned two cases in Buffalo in which this method was used. He then reported two cases he had seen in New York in the practice of Dr. Grandin, Dr. Marx making the injections. One was a signal failure; the patient felt everything; she felt pain from needle in skin although kelene was used as a local anesthetic at point of puncture; the pain deeper was acute. After escape of spinal fluid he injected 1-5 grain of cocaine and waited; no anesthesia. Cyanosis with vomiting supervened, the pulse rate being between 120--130 per minute. Dr. Grandin made an abdominal incision, the patient shrieking with pain; it was not ideal surgery, to say the least.

The second case was one of pelvic abscess; the operation, vaginal section; the result was similar to the first—the patient made such a noise that the next patient refused to be operated on. Dr. Hartwig then gave extracts from cases reported in various journals; all unfavorable except the last, a case reported from Chicago. In concluding, Dr. Hartwig said we must find the status of both sides of the question.

Dr. **A. L. Benedict** asked the essayist this question: How far up is the edge of the upper segment of anesthesia?

Dr. **Sydney Dunham** objected to the cases cited by Dr. Hartwig, on the grounds that they were not cases of labor. There is the same difference there is in other cases. He then gave the details of two labor cases seen in the service of Dr. Stone at the City Hospital, New York. There were advantages in the use of this method; chloroform predisposes to hemorrhage; ether slows labor pains; it saves the expense of the service of an anesthetiser. The bevel of the needle should be short.

Dr. **Herman E. Hayd** thanked Dr. Stone for bringing the subject here. Perhaps the reason it had not been used more here was on account of the conflicting reports seen by all of us. Dr. Grandin said he would not use the method again until ten thousand cases had been reported. Would not accept this method without the reservations Dr. Stone advocates. The general practitioner should not dabble around the spinal cord with this method. I am going to try this method at once.

Dr. **Ludwig Schroeter** discussed the paper from the standpoint of reported cases and advocated the use of chloroform as a safe anesthetic in labor, and does not advocate medullary anesthesia in normal labor, but does where os uteri is rigid, in ruptured perineum and retained placenta, or in any operation performed after labor has terminated, and in breech presentations with dorsum posterior, transverse cases. He does not believe it will take the place of chloroform in operative cases. The future will show how much we can trust it.

Dr. **Stephen Y. Howell** described the modus operandi of the production of the bad effects of cocaine in spinal puncture. Passing by diffusion through the foramen of Le Gendre into the fourth ventricle of the brain where are located the vomiting center, the cardiac center, the very foundation of the structures of life are attacked.

Dr. **Wm. Stone**, in closing the discussion said that he had personally known those cases spoken of by Dr. Hartwig. Dr. Marx had only introduced the needle three times before using it on Dr. Grandin's cases, and gave the reasons why the method might fail to yield results. The zone of anesthesia is only limited upward by the extent of the diffusion of the injection. He does not expect to see the method become universal. For diagnosis of cerebro-spinal fever, lumbar puncture is good. The method is not indicated in every case of labor. Since the technique of the operation has become more perfect the results have been better. The procedure itself is harmless.

Dr. **Dunham** moved a vote of thanks to Dr. Stone.

Carried.

Dr. **Eugene A. Smith** read a paper entitled, Appendicitis, Complicating Labor; report of a case.

Dr. **Herman E. Hayd** in discussing Dr. Smith's paper said that he believed that many of the aches and pains complained of were due to this condition; he believed that many cases reported were not appendicitis. Another reason why we do not get appendicitis in pregnant women: during pregnancy all the pelvic vessels are distended and filled with blood and naturally the little vessels to the appendix, which exists in women from the ovarian artery, makes a richer supply of blood to the appendix.

Number present, 70.

Meeting adjourned at 10.45 p.m.

THE CLINICAL SOCIETY OF THE BUFFALO GENERAL HOSPITAL.

REPORTED BY E. L. RUFFNER, M. D., Secretary pro tem.

FOR a closer *esprit de corps* in the clinical study of cases and the knowledge to be derived from such study the staff of the Buffalo General Hospital, their assistants and the clinical instructors in medicine have organised a clinical society of the Buffalo General Hospital.

The meeting was called to order, on Friday evening, November 2, 1900, at 8.15, in the medical clinic room.

Dr. IRVING M. SNOW was elected chairman; Dr. E. L. RUFFNER was appointed secretary pro tem.

Dr. ROSWELL PARK presented from his wards: (1) Man; severe burn from being caught in live electric wire, of neck and arms; skin grafting will be performed later. (2) Man; epithelioma of right half of tongue and floor of mouth; operation having removed half of the tongue. (3) Tumor of abdomen—adeno-carcinoma (?) first on medical service of Dr. Cary. Exploratory laparatomy made by Dr. Park, and condition did not warrant further procedure. (4) Man; accident—injury to spine, paralysis lower extremities, bladder, etc; clot of blood removed between first and second lumbar vertebræ, from chord. Bladder improved; some improvement in sensation of limbs. (5) Woman; movable kidney (right)—removed.

Dr. CHARLES CARY then presented (1) Woman; malaria—æstivo-autumnal—not a resident of Buffalo. Had been treated along lines of typhoid fever, with plunges, until blood examination showed filaria. (2) Man; aneurism of the arch of the aorta. (3) Double lobar pneumonia with icterus.

Dr. CHARLES G. STOCKTON then presented (1) Mulatto woman; high temperature for two weeks. Transferred to medical service by Dr. Crockett, with report that pelvic organs did not account for temperature. Blood does not show typhoid, malaria leucocytosis (?) anemia. Suspicious rash on back; now on specific treatment; diagnosis not yet made. (2) Man; esophageal stenosis; sixteen inches from teeth; probably carcinomatous. (3) Man; severe case of vomiting prolonged, with gastro-ptosis and dilated colon from obstruction. Obstruction not ascertained yet. Man very sluggish mentally.

Dr. H. U. WILLIAMS then presented for inspection a specimen of trichina spiralis in muscle. Cultures of amebæ from colon, in case of amebic dysentery, culture of B. Friedlander, amebic ulceration of colon.

Dr. H. R. GAYLORD then presented under microscope a number of rare conditions.

Twenty-five members present.

Special Article.

THE PAN-AMERICAN EXPOSITION OF 1901.

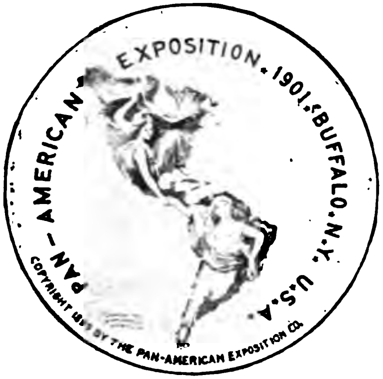
A sketch, compiled and arranged by the Editor.

CAPTAIN JOHN M. BRINKER, of Buffalo, a leading citizen, capitalist, and business man, may be said to be the father of the Pan-American Exposition, to be held at Buffalo from May 1 to November 1, 1901. This will be the first attempt to present within a single enclosure the enterprise, education, art and general business progress of the peoples of the Western Hemisphere. When Captain Brinker returned from the Nashville exposition, four or five years ago, filled with the idea of establishing an exposition representing all America, he could scarcely have dreamed that his enterprise would have reached the wonderful proportions it has already attained, to say nothing of the magnificence of its ultimate prospective magnitude.

WILLIAM I. BUCHANAN,
DIRECTOR-GENERAL,
PAN-AMERICAN EXPOSITION.

During the summer of 1897, while President McKinley was attending the meeting of the Grand Army of the Republic, he drove the stake that located the exposition grounds on Niagara River, near La Salle. Some two years ago, however, when the exposition had assumed definite shape, this location was thought untenable and one nearer to Buffalo, on the north side of the city, near the park, was chosen. This has been improved, laid out, built upon and beautified, until now, five months before the opening of the exposition, the buildings and grounds present a marvelously attractive appearance in architecture and landscape, in color and plan, in beauty and solidity, that challenges the admiration of a daily throng of visitors from all parts of the world.

Having obtained subscriptions, appropriations, loans and contributions; then having elected officers and selected grounds, the next most important question thrust upon the managers was the election of a director-general. Viewed from every standpoint it appeared to the board that the Honorable William I. Buchanan was in every way qualified for the post. Mr. Buchanan is a linguist of fluency, grace and finish; having served as minister to the Argentine Republic, he is familiar with the South American Continent, with its people and its customs and with the products of the several countries. Moreover, Mr. Buchanan is an organiser of great capacity, an executive officer of force and urbanity, and is every way fitted by experience and training to serve in the capacity of director-general of the first Pan-American exposition. The management is to be congratulated upon securing his services as the executive head of the exposition.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OFFICIAL EMBLEM.
PAN-AMERICAN EXPOSITION.

The choice of an official emblem presented a problem of no small import. Competition was invited and the design, which we illustrate, was finally chosen.

It was drawn by Raphael Beck of Buffalo, and it was accepted as the most artistic and suitable from several hundred designs submitted. It has the special merit of effectively symbolising one of the chief purposes of the exposition, which is to bring into closer social and trade relationship the republics, states and territories of North and South America. The emblem shows a fair maiden typifying the North, extending a kindly hand to clasp that of her brunette sister of the South, thus forming a bond of continental sisterhood and establishing a unity of sentiment and interest among the countries of the Western Hemisphere.

The next important step was the construction of the buildings; designs must be drawn, contracts let and many preliminary details arranged before a start could be made. Notwithstanding all this the work was commenced in the spring of 1899, and has steadily progressed in spite of strikes and storms, until a group of buildings grand in architecture, heroic in proportion, and beautiful in color effect have resulted.

The Service Building was the first structure erected on the grounds. It is the administrative headquarters of the exposition, all the officers whose presence is required upon the grounds having their headquarters there. All around the Service Building the grounds have been given the horticulture and floral decoration that will embellish the entire exposition plot. This decorative work gives the visitor a foretaste of the wonderful beauty that is to characterise the exposition.

SERVICE BUILDING—PAN-AMERICAN EXPOSITION.

The United States and several of the leading commonwealths are erecting buildings in which will be exhibited the products of the several states and dependencies.

The United States Government is spending $500,000 upon its group of three great buildings and the exhibits to be contained in them. The several departments of the government will make very complete displays, and in addition to these will be new exhibits from the Hawaiian and Philippine Islands, Tutulia, Guam, Porto Rico and Cuba. Among the more important features will be the great exhibit of fishes, the Weather Bureau, exhibits from the mint, naval and

UNITED STATES GOVERNMENT BUILDING—PAN-AMERICAN EXPOSITION.

war exhibits and many others. Of particular interest will be the big gun exhibit,—a group of three immense pieces of ordnance being mounted immediately at the north of the main building.

NEW YORK STATE BUILDING—PAN-AMERICAN EXPOSITION.

The New York State Building is to be a permanent edifice. The material used in its construction is white marble, and the style of architecture is that of a Doric Temple. At the close of the exposition this magnificent structure will become the property of the Buffalo Historical Society. It will cost upwards of $170,000—the state contributing $100,000 of the $300,000 appropriated by the legislature, and the Historical Society and the City of Buffalo contributing the remainder.

MACHINERY BUILDING—PAN-AMERICAN EXPOSITION.

Machinery and transportation always possess great interest to every intelligent person.

The Machinery Building covers an area of about four acres, and will contain a very wonderful display of modern machinery of American invention, showing the progress that has been made within the last few years. The large amount of automatic and special machinery used in American factories and mills, will form a most interesting study to all who are interested in the products of the Western world. The transportation exhibits will include all of the very latest specimens of locomotives, cars and railroad appliances. These will be sheltered in a special building in connection with the large railway station at the northern end of the exposition grounds. The ordnance exhibits will be made in connection with the machinery exhibits, and will show very remarkable progress in the manufacture of ordnance in the western world. This department is distinct from the war and naval exhibits of the Federal Government, and will be sheltered in a special building.

A TROPICAL COURT—PAN-AMERICAN EXPOSITION.

This illustration shows the court designed for the Machinery and Transportation Building. It is one of the many beautiful features of the exposition, consisting of an open space, made brilliant with flowers, and a sparkling fountain in the center of a cool and clear basin of water. About this court will be arranged comfortable seats where the visitor may rest and enjoy the beauty of the shrubs and flowers.

MANUFACTURES AND LIBERAL ARTS BUILDING—PAN-AMERICAN EXPOSITION.

The Manufactures and Liberal Arts Building covers more than four acres, and will contain the very latest productions of the mills and factories of the United States and other countries of the Western

Hemisphere. Exhibits showing the processes of manufactures will constitute a very interesting feature of this division.

ELECTRICITY BUILDING—PAN-AMERICAN EXPOSITION.

Electricity and everything connected with it will naturally possess absorbing interest to almost every visitor. The fact that so much power brought from Niagara Falls is used in Buffalo is in and of itself a marvel. Street cars, printing presses and other machinery is driven by it, while the power used upon the exposition grounds will be generated at Niagara Falls, twenty-two miles away.

ELECTRIC TOWER—PAN-AMERICAN EXPOSITION.

At the Pan-American Exposition will be shown the largest display of electrical machinery and appliances ever presented. Nearly every article will be of the very latest design, and the visitor may expect novelties without number in this interesting division. The Electricity Building is of very rich and beautiful design, having a broad loggia on the southern side while the roof line is broken with domed towers.

The Electric Tower, 375 feet high, will be the center piece of the exposition. The beauty of this tower is beyond description. The entire exterior is of richly molded work and many artistic groups of sculpture will adorn it at salient points. It will stand in a broad basin and from a niche in its southern face will gush a cascade 30 feet wide and 70 feet high.

ALBRIGHT GALLERY OF ART—PAN-AMERICAN EXPOSITION.

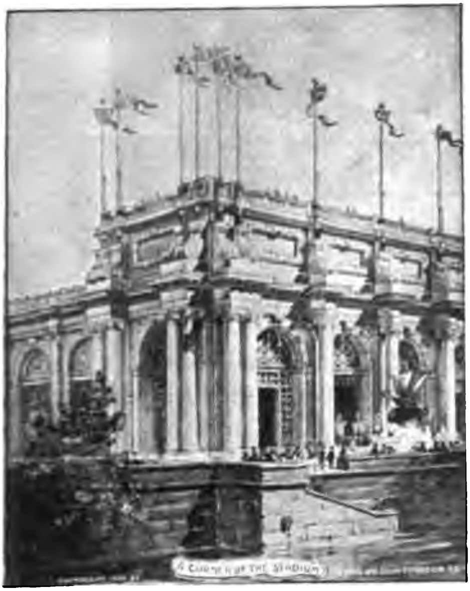
The illumination of this tower at night will be particularly beautiful and wonderful.

The Albright Art Gallery will cost more than $400,000. It is to be a permanent building of white marble. After serving the purposes of an art gallery for the exposition it will become the permanent home of the public art treasures of Buffalo. It is the gift of Mr. J. J. Albright, a citizen of Buffalo.

TEMPLE OF MUSIC—PAN-AMERICAN EXPOSITION.

Music is to be one of the great features of the exposition. Contracts have been made for a series of concerts by Sousa's Band, and the Mexican Government Mounted Band of sixty-two men. Many other famous organisations will be engaged. Large music gardens have been planned and band stands will be erected at various points. The Temple of Music illustrated herewith is one of the most beautiful of the exposition buildings, having an auditorium with a seating capacity of 2,200, and containing one of the largest and finest pipe organs ever built in the United States.

STADIUM—PAN-AMERICAN EXPOSITION.

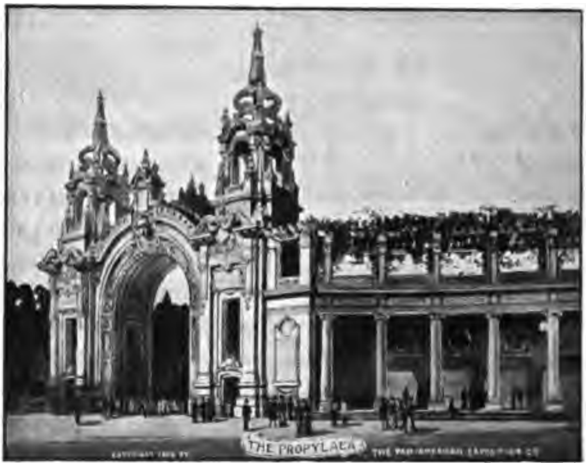

A Corner of the Stadium

CORNER OF STADIUM.
PAN-AMERICAN EXPOSITION.

Athletic sports will be well brought out and cared for in the Stadium where there will be seats for 12,000 people. It contains a quarter mile racing track and ample space for all the popular athletic games. Here also will be the displays of live-stock, automobiles and other road vehicles, farm and road machinery in motion. The large space beneath the seats will be used for exhibits.

This picture of a corner of the Stadium shows the massive and beautiful character of the architecture. This will be a very large structure and during the exposition season there will be held an athletic carnival of particular interest. The entrance to the Stadium is a large building having an arcaded arrangement on the ground floor. The upper floors are to be used for restaurant purposes.

The illustration herewith shows the western end of the propylea. This is an architectural ornament of very beautiful and imposing design. It marks the northern boundary of the Plaza, and is designed as a screen, separating the exposition from the noise and smoke incident to the traffic of steam railways which pass the exposition grounds upon the northern side. The Propylea is 510 feet long with a massive towered entrance at each end.



PROPYLEA—PAN-AMERICAN EXPOSITION.

Within the exposition grounds are 133 acres of Delaware Park, including the Park Lake. This lake is a very beautiful body of water, and upon its shores the United States Government will erect a life-saving station, where a crew of ten men will give daily exhibitions during the exposition season, showing the uses of life-saving apparatus.

In this very imperfect outline we have given our readers but a glimpse of some of the interesting features of this wonderful exhibition. A hospital building is in course of construction, and a staff of assistants and nurses will be appointed to serve during the life of the exposition. There remain other great and beautiful buildings, and the always attractive midway, which we hope to say something of in a future issue.

Abstracts.

INCOMPATIBILITIES OF HEROIN AND HEROIN HYDROCHLORIDE.

DR. WESENBERG (*Pharmaceutische Zeitung*) says that heroin and heroin hydrochloride form an essential part of so many formulæ for the relief of cough, dyspnea, and pains in the treatment of respiratory affections that it is important to determine in what combination they will prove most effective, and what are their incompatibilities. Owing to the insolubility of heroin in watery solutions it is necessary to add a few drops of some acid, acetic or hydrochloric, in order to effect its solution. This can be entirely obviated by using the hydrochloride, which is freely soluble. The only incompatibilities of heroin and the hydrochloride worthy of special mention are the alkalies, such as bicarbonate of sodium and carbonate of ammonium. On the other hand, salts of neutral reaction, such as iodide of potassium or chloride of ammonium may be used in the same mixture, and this also applies to acid salts, such as the hypophosphites or acid phosphates. The vegetable expectorants, as ipecac, senega, squill, and sanguinaria, are entirely compatible with heroin and its hydrochloride. Although many physicians employ heroin without admixture very desirable results have been reported from combinations with iodide of potassium, chloride of ammonium, and the vegetable expectorants, according to the indications present in particular cases. A word as to the dosage of heroin and heroin hydrochloride may be of interest here. The large does at first recommended at the time of the introduction of heroin are no longer preferred by the majority of authors, the average dose ranging from 1-24 to 1-12 grain in adults, and 1-120 to 1-60 grain in children. It is advisable not to employ larger doses until the smaller ones have been given a trial. Furthermore, many physicians now resort to the hypodermatic use of heroin hydrochloride in cases in which it is desirable to obtain an immediate effect, and especially in the treatment of spasmodic conditions, such as asthma, care being taken in the preparation of solutions not to add the drug until the water has partially cooled.

AMENORRHEA, DYSMENORRHEA AND KINDRED DISORDERS TREATED WITH ERGOAPIOL.

DR. W. A. WEIGHTMAN (*Obstetrics*, June, 1900,) says in the treatment of amenorrhea, dysmenorrhea, and kindred disorders, a practical experience of a number of years has convinced me that ergoapiol (Smith) leads all other emmenagogues in points of efficiency, certainty in action, and rapidity of results.

Other remedies used I have found at least to be very uncertain in their action, and a few successive failures not only cause the physician to lose faith in the value of the preparation, but also cause the patient to lose confidence in the physician. In the use of ergoapiol (Smith) I have yet to meet my first failure. The following cases will give an idea of its merits:

Case I.—M. G., age 19; had never menstruated, very anemic, suffered irregularly from severe pains in the abdomen; local examination gave negative results. I prescribed one capsule of ergoapiol (Smith) every four hours, and three days later menstruation began, and has been regular ever since.

Case II.—L.D., female, age 19; primipara; had not menstruated since confinement; a period of ten months; had tried various emmenagogues without results; consulted me April 27th last; was given ergoapiol (Smith) in doses of one capsule three times a day. Menstruation began on the 30th; was absolutely painless and normal in every respect.

Case III.—M. J., age 22, unmarried; had suffered from dysmenorrhea for several years; had been treated by specialists, but received no benefit. Examination disclosed no displacement, stenosis, or structural cause. Patient was given ergoapiol (Smith) four capsules daily, and has since had no return of the pain, and menstruates regularly.

TREATMENT OF DIARRHEA.—In general the best treatment for the usual forms of transient diarrhea is, of course, the use of the well-known intestinal antiseptics as hydrochloric acid, creosote, salol or, best of all, benzosol. It should not be forgotten by the physician, however, that many times a serous diarrhea is not readily amenable to such drugs and that the rational treatment, after there have been enough passages to free the intestinal canal fairly from any offending material that may have been the exciting cause of the attack, consists in the use of small doses of opium, preferable in the form of Dover's powder—say 2½ grains—repeated until the excessive watery purging is checked. The opium stops the exhausting serous discharge and also supports the system against the exhaustion which is so marked a feature of this form of diarrhea. The patient need not know he is taking opium and its use is indicated for only two or three days.—*Cleveland Jour. of Med.*

BUFFALO MEDICAL JOURNAL.

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EDITOR:

WILLIAM WARREN POTTER, M. D.

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THE TWENTIETH CENTURY.

WHATEVER differences of opinion may have existed last year with reference to the period when the nineteenth century should end, there can be no dispute over the fact that now the twentieth century has started out on its momentous career.

The century just closed has been remarkable for the advances in the arts and sciences, in which medicine has come in for its full share. It would be interesting to contrast the status of medicine a hundred years ago with that of today, but it would take a long chapter, and one that perhaps would weary our readers.

It is pleasant to contemplate that no profession, no calling, no guild, has done more to advance civilisation in the last hundred years, or, for that matter, during any of the centuries, than medicine. A former editor of this JOURNAL in writing of the status of the profession in 1855,[1] said:

> No institution on earth presents such a catholic uniformity of sentiment, or is so widely scattered in every land. Medical men from every town where civilisation exists, throughout the wide world, might meet in congress with common interests, a common code of ethics, and a common literature. Such a congress would represent all the various interests of learning; for it is a fact of glorious significance, that natural science and the useful arts owe half of their vigor to the discursive researches of medical men. A large proportion, probably more than half the common stock of human learning is found within the pale of our profession.

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[1] Dr. S. B. Hunt, Vol. X. (old series) p. 579.

If this were true nearly half a century ago, and none has challenged the truth of the statement, it is equally true today. Nay, even more; for in the last third of a century the relative proportions of the learning of the medical profession to the common stock of human knowledge has materially increased. Human life, too, has increased its longevity during the last generation or two under the fostering, tender care of the medical profession, which is ever busy with the problems of sanitary science, public and private hygiene, and everything pertaining to preventive medicine.

The dawning of the twentieth century witnesses the most triumphant era in the history of medicine. It would be almost too much to expect, or to predict, that as much in the way of advance will be accomplished as during the century just ended. But there is plenty of encouragement to the lover of work. The lines are to be strengthened, the front extended, the recruits drilled, and the general field of medicine is to be rendered invulnerable to attack.

It is possible, however, that our greatest danger is not from pressure from without, but from restlessness and discontent from within our own ranks. The desire for notoriety that soon seizes hold of some of our younger men, and the ambitions that overwhelm some of the older ones are to be carefully watched and curbed lest the ægis of our safety becomes imperiled.

One of the great evils of the period is, in our view, the tendency to multiply medical societies. The great number of these, local, state and national, become a great money tax in dues upon the younger physicians, not to mention the time absorbed in attending upon their meetings, and the cost of travel and maintenance pertaining to the same. It would appear to be the province of the better element in the profession to discountenance the increase of medical societies and to foster the reduction in number of those now existing. If the medical societies will amalgamate, consolidate, or dissolve, so as to reduce their number, they will, surely, in this way expand and increase their influence. The man who proposes the organisation of a new medical society is not only asking for something that is wholly unnecessary, but he is very near being a menace to the best interests of the guild of medicine.

We have not intended to discourse at length, or in detail on this or any other question of importance relating to the twentieth century of medicine, but merely to hint at a feature or two of moment.

THE MODERN TREATMENT OF EPILEPSY.

IT HAS been justly said that there is nothing new under the sun, and the review of the modern treatment of epilepsy might emphasize the truth of the saying. Notwithstanding this fact, it must be admitted that a rearrangement of the principles of treatment and their close application to the individual case, is a marked advance over the former desultory drug prescribing. The demands today are that the physician should watch and regulate the vegetative hygienic and psychic life. All disordered bodily functions of the epileptic must be corrected; while the daily activity of the individual patient, his work, education, and play, must be used reflexly to counteract the baleful influence of an inborn convulsive predisposition. In brief, the whole life of the epileptic must be reëstablished on broad and comprehensive principles to aid and round out the drug treatment of the disease.

We find bromides still ranking in the first place as the most efficacious drugs. Clark, of the Craig Colony for Epileptics, believes, after an extensive experience with the drug in the most pronounced cases, that bromides must be given by carefully graduated doses, in amounts ranging from 300 to 400 grains daily, or until the seizures are stopped. He maintains, nevertheless, that extreme caution in giving the drug must be exercised; collateral tonics, massage, and baths, must be unremittingly employed to counteract the general sedative effect on mind and body.

In the surgical treatment, conservatism seems to be the order of the day. Pure idiopathic epileptics should not be trephined for their disease; even a definite order of muscular involvement should not cause us to operate in any idiopathic case. The earlier the prognosis for operation in traumatics the better. We should be very guarded as to recovery or even improvement in traumatic cases in which neuropathic histories are prominent. It should be borne in mind that cases not infrequently are made worse by trephining; it therefore should not be lightly recommended even in traumatic epileptics; statistics show about 4 per cent. of recovery by operating, which result is as good as medical treatment in idiopathics. Post-operative treatment by bromides must be instituted and followed faithfully for several years. We venture to say that by closer diagnosis and treatment, both surgically and medically, the percentage of improvement and recoveries will be increased materially in the future.

DRUG STANDARDISATION AGAIN.

IN THE *Jour. of the Am. Med. Assn.* for November 24, 1900, appeared an able paper by Dr. J. Tracy Melvin, on Therapeutic Progress, which should set physicians to thinking. In support of his statement that "therapeutics is today far behind all other branches of medical science," the writer presents what he believes to be the principal causes of this condition of affairs. Yet, however well grounded these factors may be, it seems to us that at least one of them may be set aside as fanciful rather than real—namely, that "our best known and most used remedies are of uncertain and indefinite composition."

So far as medicinal chemicals are concerned, what adequate reason is there that a practitioner should employ remedies "of uncertain and indefinite composition?" Chemically pure drugs can be had by insisting that they be supplied. But are we justified in claiming as much for drugs and preparations of drugs obtained from the vegetable kingdom? The subject is worthy of more than passing thought. We are well aware that no two specimens of crude drug contain exactly the same percentage of active principle. In truth, different specimens of the same drug upon assay are frequently found to vary to such an extent that one may be ten, twenty, or even fifty times as rich in active principle as another. Consequently, we may expect as great diversity in the strength of corresponding preparations of such drugs, whenever scientific methods are not utilised to correct natural discrepancies.

The case is far from hopeless. Although, as Dr. Melvin fears, "it is practically impossible that any two samples of vegetable drugs can contain exactly the same amount of active medicinal principles," finished preparations of the same drugs should be and can be made of uniform chemical and medicinal value. In fact, some of our leading manufacturers actually do make their fluid extracts of powerful drugs conform to fixed and definite standards of strength, so that one minim or ten minims of fluid extract of opium, or fluid extract of nux vomica, always represents a definite amount of active principle, and may therefore always be expected to yield a definite therapeutic result. The well-known house of Parke, Davis & Co., for instance, who were the pioneers in drug standardisation, have for many years marketed a trustworthy line of assayed fluid extracts which are made to conform rigidly to fixed standards of alkaloidal strength. True, there are manufacturers of fluid extracts who are utterly indifferent to the necessity of standardising their products; the physician who in his clinical work does not court failure has only to let such preparations severely alone.

The objection has been raised that certain powerful drugs such as the heart tonics, digitalis, strophanthus and convallaria; the powerful arterial sedative, aconite; ergot; cannabis indica; squill, and others equally important, cannot be assayed by chemical processes. That is true. It is a scientific fact that the active principles of these drugs are decomposed by the reagents used in the assaying processes. Happily the method of physiological assay is now available, and for this important advancement in drug standardisation we are again indebted to the firm of manufacturing pharmacists previously referred to. Their experts have made practical use of the fact that certain of these drugs will produce characteristic physiological effects upon certain animals. For instance, good ergot blackens the comb of the cock, while an inferior specimen fails of effect. An active specimen of cannabis indica produces a very peculiar train of phenomena in dogs, such as disturbing the mechanism of coördination, and symptoms similar to those described in the text-books as likely to be caused by toxic doses in man. The value of the heart tonics is measured by means of delicate apparatus which accurately determines the effects of graduated doses upon the cardiac mechanism of frogs.

We are walking in the dark when we prescribe a preparation of unknown strength, the first dose of which may prove ineffective, or possibly toxic. We are compelled, virtually, to make a physiological test of the drug upon our patient. Gradually the dose is increased or diminished until we find that a definite amount produces the effect desired. But should the prescription be refilled with a preparation from another manufacturer, or by another apothecary, the correct dose must again be determined experimentally, as before.

The manufacturing pharmacist must do this work for us. He has facilities that are not available to the physician and the dispensing pharmacist. Let the manufacturer of drug extracts standardise his preparations by chemical assay when possible, and by physiological assay when the older method is inexpedient. Then the physician will be spared the humiliation of palpable impotence in the face of danger; there will be no occasion for needless experiment at the bedside, where so frequently prompt drug action saves lives that are too valuable to be imperiled by unscientific methods in pharmacy or therapeutics.

The amended Army Bill which has passed the House and is now being considered by the Senate, provides for the appointment of 200 surgeons, 50 of whom shall be majors, and 150 captains, who shall be commissioned for two years. This is but a short step in the right direction. The United States Army is woefully lacking in medical officers, and in course of time, the medical department may grow to be sufficiently large to properly care for the army.

The University of Pennsylvania exhibit, which was one of the most complete in the Paris exposition educational department, will be brought to Buffalo for the Pan-American Exposition.

PERSONAL.

Recent army orders announced the appointment of Maj. Ira S. Brown, surgeon, U. S. V., to be chief surgeon of the district of Panay, Philippine Islands. This appointment is in the nature of a promotion in recognition of Dr. Brown's efficient service.

Dr. John T. Pitkin, of Buffalo, read a paper on How to Print the x-Ray Picture for Details, before the Röntgen Society during its recent meeting at New York.

Dr. William Warren Potter has been appointed a member of the auxiliary committee of the third Pan-American Medical Congress, to be held at Havana, February 5-9, 1901.

Dr. J. Henry Carstens, of Detroit, Mich, by invitation addressed the Marion County Medical Society, at Indianapolis, Ind., November 13, 1900, on the subject of The Diagnosis and Treatment of Gallstones. Dr. Carstens gave an operative clinic at the City Hospital, and was entertained at dinner by Dr. L. H. Dunning.

Dr. Victor C. Vaughan, of Ann Arbor, Mich., addressed the alumni and students of the University of Buffalo, Friday afternoon, December 21, 1900, at 4.30 o'clock. The subject of his discourse was Bacterial Toxins.

Dr. James T. Jelks, of Hot Springs, Ark., the accomplished editor of the *Hot Springs Medical Journal*, delivered the dedicatory address at the opening ceremonies of the new and commodious infirmary recently established by the Sisters of Charity at Little Rock, Ark.

Dr. Edward B. Angell, of Rochester, visited Buffalo on Monday, December 17, 1900, to attend the meeting of the Western New York Alumni Association of the University of Pennsylvania. Dr. Angell was chosen president of the Association.

Dr. Roswell Park and **Dr. Charles Cary**, of Buffalo, recently visited Mexico as the guest of Mr. Frank H. Goodyear, who entertained a group of friends in his private car. The tourists were absent about three weeks, returning to Buffalo in season for the Christmas holidays.

Dr. William Ridgeley Stone, of New York, visited Buffalo on Tuesday, November 27, 1900, and read a paper before the section on obstetrics at the Buffalo Academy of Medicine, entitled Cocainisation of the spinal cord in Labor by means of Lumbar Puncture. Dr. Stone was entertained at luncheon by Dr. Albert J. Colton, chairman of the section.

Dr. Chauncey Pelton Smith, of Buffalo, was elected vice-president of the Western New York Alumni Association of the University of Pennsylvania during its foundation meeting held at Buffalo, December 17, 1900.

Dr. Julius Ullman, of Buffalo, has been appointed local correspondent of the *Journal of the American Medical Association*—an admirable selection.

Dr. Martin J. Downey, of Buffalo, has been appointed assistant surgeon of the Erie railway. The appointment was made on the nomination of Dr. Clayton M. Daniels, chief surgeon.

Dr. Sidney A. Dunham read a paper on the Cause and Prevention of Dipsomania before a meeting of the Hornellsville Medical Association at its meeting in December. While in Hornellsville Dr. Dunham was the guest of Dr. Walker at the Steuben Sanitarium.

Dr. Daniel Lewis, president, and other members of the State Board of Health, visited Buffalo early last month, and were in official session one day with reference to the nuisance created by the rendering works at East Buffalo.

OBITUARY NOTES.

Dr. Charles Sabin Taft, of Mount Vernon, N.Y., died at his residence in that city December 18, 190c, aged 65 years. Dr. Taft was an acting assistant surgeon, U. S. Army, at the time President Lincoln was assassinated, April 14, 1865, and, being in Ford's theatre at the time, was the first physician to render professional service to the dying president. After the war Dr. Taft located at Washington, where he established a high-class drug store, but later resided at Mount Vernon, where he died. He was a native of Lyons, Wayne County, where he was born in 1835.

Dr. Ephraim Ingals, one of the most prominent men in the early history of Chicago, Ill., died in that city December 18, 1900. He was born in Abington, Conn., on May 26, 1823. Dr. Ingals went to Chicago when a boy. He arose to prominence in his profession and as a citizen. He was a personal friend of Abraham Lincoln.

Dr. Romaine J. Curtiss died at his residence in Joliet, Ill., November 20, 1900, after a short illness. Dr. Curtiss was born in Richland County, O., October 1, 1840. In 1862 he entered the Union Army as hospital steward of the 123d Ohio Volunteers, and in April, 1863, he was appointed a medical cadet in the regular army. Later he was appointed assistant surgeon in the navy, serving till the close of the war. He then located at Angola, Erie County, N.Y., where he practised medicine for seven years. He went to Joliet from Erie County in 1873 and has resided there since that time.

Dr. John H. Miller, of San Leandro, Cal., U. of B. '77, died at his home October 12, 1900. Dr. Miller had been in active practice until a short time before his death.

SOCIETY MEETINGS.

The Niagara Falls Academy of Medicine met at the office of Dr. W. R. Campbell, on Monday evening, December 3, 1900, at 8.45 p.m. Dr. C. G. Leo-Wolf read a paper.

The Physicians' Club at its last meeting was entertained at the Genesee Hotel by Dr. D. P. Doyle. Cases of interest were reported by Drs. E. M. Dooley, J. Henry Dowd and J. J. Finerty. The essayist was Dr. James S. Porter, whose subject was The Smallpox Epidemic of 1888-1889.

THE Third Pan-American Congress that was to have been held at Havana, December 26-29, 1900, has been postponed to February 4-8, 1901. While yellow fever was still somewhat prevalent, though subsiding, it was not thought prudent to hold the meeting. The success of the Congress is already assured. More than 100 papers are now on the program and others are constantly being added. Dr. Ramon Guiteras, 75 West 55th Street, New York, is the Secretary.

THE Buffalo Academy of Medicine held meetings during the month of November and December, 1900, as follows:

Section on Obstetrics.—Tuesday evening, November 27th. Program: Cocainisation of the spinal cord, by means of lumbar puncture in labor, Wm. Ridgeley Stone, of the New York City Hospital; Discussion by Marcel Hartwig and Matthew D. Mann. Appendicitis complicating pregnancy, with report of a case, Eugene A. Smith. The meeting of this section announced in the program for Tuesday, December 25th (Christmas Day), is postponed to Thursday evening, January 3, 1901.

Section on Surgery.—Tuesday evening, December 4th. Program: The closure and dressing of abdominal wounds, Stephen Y. Howell. Treatment of septic peritonitis, Eugene A. Smith.

Section on Medicine.—Tuesday evening, December 11. Program: ' Cyclic or periodic vomiting in childhood, Charles G. Stockton. The treatment of disease locally by hot air, Prescott LeBreton.

Section on Ophthalmology, Otology, Rhinology and Laryngology.—Monday evening, December 17th. Program: The etiology and treatment of concomitant strabismus; a reconsideration, Alvin A. Hubbell. The influence of the vertical muscles in the production of asthenopia, Arthur G. Bennett.

Section on Pathology.—Tuesday evening, December 18th. Program: Some notes on globulin and albumose, as found in urine, A. L. Benedict. Acute infection, Eugene Wasdin, Marine surgeon.

THE Medical Society of the County of Erie will hold its eightieth annual meeting at the Y.M.C.A. building, corner of Mohawk and Pearl Streets, at 10 o'clock a.m., Tuesday, January 8, 1901. At this meeting eight delegates to the Medical Society of the State of New York will be elected and other important business transacted.

A program is in preparation of which the following are some of the features: A Country Health Officer, Dr. E. H. Ballou, President, Gardenville; Legislation in reference to tuberculosis, Dr. J. H. Pryor; A brief résumé of the grosser animal nature and its application in medicine, Dr. Geo. N. Jack, Depew, N.Y.

The Erie County Medical Association held a meeting for organisation Thursday, December 20, 1900, at the Buffalo Library rooms. The call, which contained grandiose statements with reference to the New York State Medical Association, likewise several so-called material inducements to become members of the new county organisation, was signed by the following-named physicians: DeLancey Rochester, chairman; Arthur G. Bennett, secretary; Chas. G. Stockton, Alvin A. Hubbell, Chas. A. Wall, W. H. Thornton, committee.

The Medical Society of the State of New York will hold its 95th annual meeting in the City Hall, at Albany, January 29, 30 and 31, 1901, under the presidency of Dr. A. M. Phelps, of New York City.

The temporary program lately issued contains an excellent group of papers, by men of distinction, both from within and without the state. Among the guests from other states who will participate in the proceedings are Dr. Charles A. L. Reed, of Cincinnati, president of the American Medical Association; Dr. L. S. McMurtry, of Louisville; Dr. George Ben Johnston, of Richmond; Dr. Wm. E. B. Davis, of Birmingham, Dr. James F. W. Ross, of Toronto; Dr. J. Collins Warren, of Boston; Dr. Thomas Roddick, of Montreal; Dr. John B. Murphy, of Chicago; Dr. Merrill B. Ricketts, of Cincinnati, and Dr. Victor C. Vaughan, of Ann Arbor. The names from Buffalo on the program are Dr. Henry R. Hopkins, Dr. Herman Mynter, Dr. John H. Pryor, Dr. Wm. C. Krauss, Dr. Lucien Howe and Dr. William Warren Potter.

On Wednesday morning, January 30th, at 8.15 o'clock, a demonstration clinic, conducted by Drs. Albert Vander Veer, Samuel B. Ward and Willis G. Macdonald, of the Albany Hospital staff, will be held at the Albany hospital.

Wednesday evening a reception will be held by the president from 6.30 to 7.30, and the annual dinner will be served at the Hotel Ten Eyck at 8 o'clock.

There will be two discussions during the meeting. The first, on Wednesday morning, will begin with a paper, entitled, A Contribution to pelvic infection in women, by Charles A. L. Reed, Cincinnati;

discussed by J. F. W. Ross, Toronto, Ont.; L. S. McMurtry, Louisville, Ky.; W. E. B. Davis, Birmingham, Ala.; Bache McE. Emmet, New York; William M. Polk, New York; George M. Edebohls, New York; James Clifton Edgar, New York; James P. Boyd, Albany. This will be followed by a report of five cases of ovarian tumors with twisted pedicles, by George Ben Johnston, Richmond.

The president's address, at 12.15, on Hernia will close the morning session.

The second discussion will open the Wednesday afternoon session, at 2 o'clock, and will begin with a paper on Surgery of the spleen, by J. Collins Warren, Boston, Mass; discussed by Albert Vander Veer, Albany; Charles McBurney, New York; Robert F. Weir, New York; Robert T. Morris, New York; Thomas Roddick, Montreal, Can.

The following papers will then be read: The pathology and diagnosis of intestinal obstruction, J. B. Murphy, Chicago; Inguinal hernia, Merrill B. Ricketts, Cincinnati; Toxin of the colon bacillus, Victor C. Vaughn, Ann Arbor, Mich.

Communications relating to the presentation of papers or to any changes in the preliminary program, should be sent to the business committee: Frank Van Fleet, chairman, 63 East 79th St., New York City; J. B. Ransom, Dannemora; or F. H. Parker, Auburn.

COLLEGE AND HOSPITAL NOTES.

PLANS have been filed and ground broken for the new four-story Emergency Hospital at Eagle and Pine Streets. When completed it will be one of the most perfectly equipped and imposing emergency hospitals in this country, and one which will be highly creditable to the City of Buffalo.

The building is to be 142 by 60 feet. The material is to be steel, with porous terra cotta arches, and brick with Medina stone trimmings for the exterior. An ambulance entrance runs along the end of the building. The basement is planned principally for reception work essential to such a hospital. The main features are the reception and operating rooms. This floor is on a level with the ambulance entrance, so that patients may be discharged from the wagons with ease. Three operating rooms for minor surgery or preliminary examinations are conveniently placed. There is, besides, the pharmacy, dining room and kitchen.

On the first floor there are two wards besides the reception rooms, and a couple of additional operating rooms. The diet kitchen is situated here also. On the next floor there are more wards and a chapel. The third floor is cut up into wards and private rooms for patients. A feature of the third floor is the operating amphitheatre, which is arranged according to the latest requirements of modern surgery. It occupies the best position as to light and is separated from the wards and private rooms, and within easy reach of the elevator. There is a diet kitchen here also.

The steel frame is entirely enclosed by porous terra cotta. The floors are cement over terra cotta arches with marble mosaic. The wainscoting is marble. This style of construction extends through the operating rooms, wards, reception rooms, halls, kitchens, etc. Only the doors, door frames and window frames are of wood.

The roof of the building is constructed on the roof-garden plan. The elevator opens on the roof and patients and nurses can use this space, 142x55, for exercise during the summer. The building is to cost $60,000.

THE new German Hospital, on Jefferson Street, was formally opened Sunday evening, December 2, 1900, when a splendid bazaar was inaugurated. The building is a substantial one in every respect, and is ample for the needs which it is intended to meet. Mr. William Lautz made the opening address in German. The three floors of the building were filled with booths, in which were attendants dressed in nurses' costume. The bazaar continued two weeks and was a splendid success.

The hospital association was incorporated in 1895 and for several years has conducted a dispensary at No. 621 Genesee Street, where over 2,000 persons have been treated yearly. The dispensary will be continued. The officers of the association are William Simon, president; Dr. Charles H. W. Auel, vice-president; Jacob J. Lang, treasurer; Charles H. North, secretary; George F. Lehmann, assistant secretary; trustees, Charles A. Lautz, Jacob Stern, Otto Reinecke, E. G. S. Miller and Charles Duchmann.

The hospital will be ready to receive patients about January 1st.

THE ALUMNI of the University of Pennsylvania who reside in Western New York have formed an alumni association. Mr. Charles C. Harrison, Provost of the University, accompanied by Dr. H. C. Wood and a number of the trustees came to Buffalo to assist the local committee, consisting of Drs. Ernest Wende, W. H. Heath, Chauncey Pelton Smith and Truman J. Martin to complete the organisation.

The first annual dinner was given at the Saturn Club, December 17, 1900.

Hon. T. Guilford Smith, Regent of the University of the State of New York, gave a reception at the University Club in honor of Provost Harrison during the latter's stay in Buffalo. There are about 250 alumni in Western New York, 30 of whom live in Buffalo.

THE Almshouse committee of the board of supervisors recently examined the architect's revised plans for the consumption hospital to be built next to the Almshouse, to take the place of the one destroyed by fire last year. The amended plans call for a two-story building to cost, it is estimated, about $45,000. On the lower floor there will be accommodations for the 40 male consumptives and there will be ample quarters on the upper floor for the 16 female consumptives now at the County Hospital.

PLANS for a cancer hospital in connection with the Buffalo General Hospital were filed with the bureau of buildings last month. The plans were drawn by Mr. George Cary, the architect.

They provide for a three-story fire-proof building suitable for a complete modern hospital. It will be used as an annex of the Buffalo General Hospital and will be erected near that institution.

Book Reviews.

DEAVER'S SURGICAL ANATOMY. A treatise on human anatomy in its application to the practice of medicine and surgery. By JOHN B. DEAVER, M.D., Surgeon-in-Chief to the German Hospital, Philadelphia. In three royal 8vo volumes of more than 600 pages each, containing about 450 full-page plates, nearly all drawn for this work from original dissections. Volume I.—Upper extremity; back of neck, shoulder and trunk; cranium; scalp; face. Volume II.—Neck; mouth, pharynx, larynx, nose; orbit; eyeball; organ of hearing; brain; female perineum; male perineum. Philadelphia: P. Blakiston's Son & Co, 1012 Walnut St. 1900. [Price, handsome cloth, $21.00; full sheep, $24.00; half green Morocco, marbled edges, $24.00; half Russia, gilt, marbled edges, $27.00 net.]

Twelve years ago Dr. Deaver did the preliminary work on what he intended to be a text-book on surgical anatomy. He was well-equipped for such a task, and the world of surgical literature was in a fair way to receive a most notable addition, one which was sadly needed; for, coming from such a master anatomist as Deaver it could not fail to add to our anatomical knowledge. As he progressed with the work, however, it began to take on new phases and gradually it was broadened in scope.

As an anatomist Deaver ranks among the foremost men in the world, and his skill in this direction dates back to the days of his under-graduate life with that famous class of University of Pennsylvania students, which turned out such men as Price, Dorcum, Roberts, Huidekopper and Anders. It is small wonder, then, that as he got deeply into the work it was changed from a text-book on surgical anatomy to an anatomy, pure and simple, masterly in conception, superb in construction and unapproachable in its marvelous excellence.

This change of plan necessitated considerable enlargement and the work grew to three volumes, two of which have been published. The third will appear in the near future, and then will be completed the greatest work on human anatomy which the world has ever seen.

An idea of the importance attached to this publication may be had when it is known that the plates alone, numbering over 400, cost, according to current statement, in the neighborhood of $40,000. One can hardly wonder at this when a careful study of the illustrations is made. They are the most delicately exquisite, and at the same time most perfect works of their kind which have ever appeared in any work on anatomy. There is not the slightest suspicion of hackneyed work in this connection. In the first place, the illustrations are different from those we have been in the habit of staring at in the perfunctory anatomies of our college days. They are not our old friends. They look new; there is an air of originality about them which sets well, and which is thoroughly in keeping with Deaver's work in the text. And this is all so because every plate was made from drawings of original dissections. They show it and the work speaks eloquently of the years of painstaking conscientious labor which have been devoted to the preparation of the anatomical material from which the drawings were made. Much of this work was performed by Dr. J. Rex Hobensack, who was formerly Dr. Deaver's prosector, and to whom the author gives grateful credit in his preface.

The first volume takes in the anatomy of the upper extremity, back of the neck, shoulder, trunk, cranium, scapula and face. In the second volume we have the neck, mouth, pharynx, larynx, nose, orbit, eyeball, region of the ear, brain, female perineum and male perineum. The third volume, which will soon appear, will contain the abdominal wall, the abdominal cavity, pelvic cavity, chest and the lower extremity.

The chronic pessimist proclaims that nothing is perfect and such an one might, by reason of the distortion of his mental vision find, or imagine he finds, a defect in this work of Deaver; yet his criticism would not be just, because it would not be honest. As a matter of fact, this anatomy is above criticism. It is above honest criticism, because there is nothing about it which honest criticism could conscientiously find to criticise. It is above dishonest, mawkish criticism, because its quiet dignity would damn such a critic before his words were uttered. So let us be content with this and thank Deaver for writing the work and Blakiston for publishing it.

Let us keep Gray handily by, because it is our tried and trusty friend of reference; and Gerrish, because it has clothed the dry, rattling bones of osteology with interest, and Deaver, because it is the best anatomy which has ever been published, and is needed in our more advanced studies and work.

A PRACTICAL TREATISE ON MEDICAL DIAGNOSIS. For the use of students and practitioners. By JOHN H. MUSSER, M. D., Professor of Clinical Medicine, University of Pennsylvania, Philadelphia. New (fourth) edition, thoroughly revised. In one octavo volume of 1104 pages, with 250 engravings and 49 full-page colored plates. Philadelphia and New York: Lea Brothers & Co. 1900. [Price, cloth, $6.00 net; leather, $7.00 net; half morocco, $7.50 net.]

The fourth edition of Musser's Medical Diagnosis is demanded although its predecessor was published less than a year ago. The rapid exhaustion of the third edition is a gratifying evidence that the author's efforts have been duly appreciated, and that more attention is being paid to the art of making careful diagnoses.

Succesful treatment, the aim of every practitioner, can follow only an accurate and complete diagnosis, and this in turn demands the use of every known method of investigating symptoms and conditions, however complicated or obscure. To no more trustworthy, authoritative, modern or comprehensive book can the practitioner refer in times of anxiety and doubt than the one under consideration.

The work is divided into two parts; Part I. dealing with general diagnosis and Part II. with special diagnosis.

Under Part I. several chapters are devoted to the study of data obtained by inquiry, the careful investigation of the onset, and course of the disease in question, the early history, family history, age, sex, occupation and habits and environment of the patient, giving the physician a bird's-eye view of the case before he undertakes to obtain data by observation. In the chapters allotted to the examination of the patient, the facts obtained are carefully classified and aids thrown out to the reader to help him to correctly interpret their meaning. A work which is constantly passing from edition to edition is able to keep abreast of the times and enables the author to keep his work carefully revised to the latest date; such revision has been accomplished in the present edition as Koplik's latest paper on the measles spots in the buccal cavity, on page 260, will testify. The latest investigations on the normal and pathological condition of the blood have been incorporated, and the blood plates are beautifully and accurately executed.

The special diagnosis of the various organs of the body follows, the author starting with the nose and larynx, followed by chapters on the lungs and pleura, heart, bloodvessels, mediastinum, mouth, fauces, pharynx, esophagus, stomach, intestines, liver, spleen, pancreas, kidneys and diseases of the nervous system.

If any of the chapters on the special organs were to be more highly lauded than the others it would be that of the lungs and pleura. Here the author displays his greatest generalship in marshaling the many intricate and troublesome facts concerning the respiratory tract, and with an ease and scientific grace that calls forth admiration. The plates with the platting of the relations between the various organs of the chest and abdomen are great helps to the enquiring physician, and cannot help but give what he seeks—information. The chapter on the disease of the nervous system is well written, but rather scant for such an important subject and the author has abridged and crowded many facts into rather narrow confines.

Instruments of precision, the topography of disease and every accepted method of clinical and bedside investigation are so clearly and fully described that Musser's Diagnosis must take its place among the very best works of its kind and therefore appeals to the student and to the practitioner as a never failing guide and consultant.

The illustrations have been revised as thoroughly as the text, and beside 250 engravings, the book contains no fewer than forty-nine full-page colored plates. The best of the bookmakers' art has been expended in bringing this book before the medical world.

W.C.K.

A TREATISE ON MENTAL DISEASES. Based upon the lecture course at the Johns Hopkins University, 1899, and designed for the use of practitioners and students of medicine. By HENRY J. BERKLEY, M. D., Clinical Professor of Psychiatry, Johns Hopkins University, etc Octavo, pp. xiv.—601. Illustrated. New York: D. Appleton & Co. 1900.

The addition of a new work on mental diseases would ordinarily attract little attention from the reviewer. In no branch of medical literature do we find greater sameness in description and method of subjects. Of late we have had many excellent works upon insanity. The plan of these has been mainly that of careful classification according to clinical types. The description of types of insanity has left nothing to be desired. In this volume we notice with pleasure a distinct departure in method. We see the direct effect of the close pathological study that has been done in the last ten years.

In the section on special pathology, Berkley presents, as it has not before been presented in an American clinical treatise on insanity, the special pathology of the nerve cell. He reviews the results obtained in the study of the changes in the granula and achromatic substance of the cell by the methyline blue method. The manner of experimentation by section of the root fibres and by poison effects is clearly described and the results of a host of experimenters are presented. Of the chrome silver method of staining the entire neurone as developed by Golgi, he says that this has not been prolific of good results when applied to the cortex of man. By this method the cellular changes shown are limited to lesions of a gross character, none of the finer detail of the nucleus or protoplasm being brought into view.

The pathology of cerebral bloodvessels is clearly presented and its value increased by several good illustrations of arterial changes in different specimens reproduced by photographs.

In the classification of mental diseases he has followed Krafft-Ebing and divides insanity into four groups.

Group 1, mental diseases without ascertainable pathological alteration of the brain substance. This includes acquired forms of insanity arising in individuals without an inherited tendancy to insanity. The chief causes are physical diseases and shock. These are the cases most benefited by therapeutic measures.

Group 2—mental diseases sequential to ascertainable alterations of the cerebral substance. In this group the mental symptoms are the result of lesion of the neural tissues. They are secondary to organic degenerative or inflammatory processes beginning in the bloodvessels of the cerebral pulp.

Group 3—insanities due to inherited or acquired mental instability. These are the cases in whom we find defective development of the cranial bones, imperfections in the brain convolutions. This class is very large and probably includes more cases than any of the other groups.

Group 4—states of complete or incomplete retardation of the psychical and physical development. These cases depend upon gross deficiences in the development of the brain and also in the lack of some essential glandular secretion, or upon a cerebral hemorrhage, trauma or infectious processes occurring in the earliest years of life, which have prevented the perfect evolution of the faculties by retarding or stopping brain growth.

In the treatment of insanities the author is firm in his belief that the milder cases of the acute and chronic forms should be treated at home. The description of the general well-known forms of insanity are graphic and will give the reader as good an idea of insanity as can be obtained from any book.

Altogether we are very much impressed by the general excellence of this book. The paper, type and illustrations are all of a quality that add much to its value. As a book of reference it is fully up to date and will meet the requirements of the general practitioner and specialist. J. W. P.

A Reference Handbook of the Medical Sciences. Embracing the entire range of scientific and practical medicine and allied science. By various writers. A new edition, completely revised and rewritten Edited by Albert H. Buck, M. D., New York City. Volume I.—AAC-BLA. Illustrated by numerous chromo-lithographs and 498 half-tone and wood engravings. Nine volumes, imperial 8vo. New York: William Wood & Co. 1900. [Price, muslin, $6.00 per volume; leather, $7.00 per volume; half morocco, $8.00 per volume.]

The republication of this great work has involved an enormous outlay of money as well as the consumption of valuable time. Nevertheless, judging by the appearance of the first volume, it will result in ample compensation to the publishers and all others interested in producing the Reference Handbook.

All the articles have been revised, rewritten or otherwise reconstructed so as to bring each one forward to the present period. One of the most attractive parts of the book consists in the illustrations and these, whether on wood, half-tone plates, or chromo-lithographs, are exquisite specimens of artistic engraving. Take for instance, plate VI., facing page 111, illustrating pigmentation of the skin and of the mucous membrane of the tongue, observed in Addison's disease, and nothing could be more complete in detail or color. Plates X., XI. and XII., illustrating pathogenic bacteria, afford splendid opportunities for study in this field, even to the novitiate.

The text of the articles has been written by men of skill and judgment who possess expert knowledge with reference to the subjects they have prepared for the work: The contributors from Buffalo to this volume are: Herbert M. Hill and Julius Pohlman—names well known to the profession. The letter press deserves mention as being well adapted in clearness and execution to the demands of such a work. We bespeak the interest of the entire profession of medicine in this eminently useful and practical storehouse of knowledge.

TWENTIETH CENTURY PRACTICE. An International Encyclopedia of Modern Medical Science. By leading authorities of Europe and America. Edited by THOMAS L. STEDMAN, M. D., New York City. In twenty volumes. Volume XX. "Tuberculosis, Yellow Fever and Miscellaneous. General Index." New York: William Wood & Company. 1900.

With the beginning of the twentieth century we fittingly present a notice of the last volume of the Twentieth Century Practice. It bespeaks great industry and enterprise that the editor and publishers have been able to complete a work of this magnitude in importance within the period of time which they allotted themselves at the outset. The most important subject considered in this volume is tuberculosis. August Jerome Lartigau deals with its bacteriology, pathology and etiology; Henry W. Berg considers its symptomatology; S. A. Knopf discourses upon its diagnosis, prognosis, prophylaxis and treatment, and John T. Bowen considers tuberculosis of the skin. These four essays together, form a most elaborate and discursive treatise upon a disease that is now known to be not only infectious but preventable.

Yellow fever is the next topic which is presented in this volume and it is written by Wolfred Nelson. Since tropical islands have become a part of our domain this destructive malady has come to be considered in the light of prevention. Heretofore our only remedy has been through rigid quarantine against infected districts. Now, by applying the scientific principles of sanitation at the sources of the disease we may expect to stamp it out with reasonable certainty.

The miscellaneous subjects considered in this volume are: Poisoning with snake venom, by Thomas R. Brown; Mushroom poisoning, by Beaumont Small; Diseases of the uvula, soft palate and faucial pillars, by James E. Newcomb, and neural and mental defects in childhood, by Francis Warner. The general index then follows which consists of very nearly 300 pages. This is a most comprehensive index which enables the searcher to find any title at short notice.

In concluding this notice we feel it appropriate to thank the editor and the publishers for this comprehensive and learned work upon medicine, that in and of itself constitutes a library of no mean proportions, and contains some of the best literature extant on the subjects of which it treats.

MEDICAL AND SURGICAL NURSING. A treatise on modern nursing from the physician's and surgeon's standpoint, for the guidance of graduate and student nurses, together with practical instruction in the art of cooking for the sick. Edited by H. J. O'BRIEN, M. D., Professor of Clinical Surgery, Hamline University; Surgeon to St. Joseph's Hospital, St. Paul, etc. Duodecimo, pp. ix. to 287. New York: G. P. Putnam's Sons. 1900. [Price, $1.50.]

There are plenty of books on nursing abroad in the land. To gain a place for itself a new book must have especial merit. This work makes a strong claim for favor in the very plan of it. It contains fifteen chapters, each, with one exception, written by a physician who presents his subject as he believes the nurse should understand it. The chapter headings read as follows: General nursing, bacteria; asepsis and antisepsis; anesthesia; shock; deformities; acute infections and contagious diseases; fractures; dislocations, and wounds; diseases of women; obstetrics; infant and child; nervous and mental diseases; poisons; eye and ear; cooking for the sick. The last chapter is by a woman no less a specialist in the subject assigned her than are the other writers in theirs.

No one knows so well as the physician the things which it is desirable that the nurse should learn. Those who are seeking for a thoroughly good book to place in the hands of the pupil nurse to supplement and fix in her mind the lessons of the class-room, will do well to carefully examine this volume. We believe it fills a gap in the literature of nursing. M. J. F.

A TEXT-BOOK OF MEDICAL TREATMENT OF DISEASES AND SYMPTOMS. For the use of students and practitioners of medicine. By NESTOR TIRARD, M. D., F. R. C. P., Professor of Principles and Practice of Medicine, King's College, London. Adapted to the U. S. Pharmacopeia by E. Quin Thornton, M. D., of Jefferson Medical College, Philadelphia. In one 8vo volume of 624 pages. Philadelphia and New York: Lea Brothers & Co [Price, cloth, $4.00 net.]

The books to which the busy practitioner most often turns are those which treat of the cure of disease, and these are the ones least liable to be found in his small neglected library. The demand for such works has stimulated writers to prepare such treatises, and among the best thus far produced Tirard's stands high on the list. To prepare such a work the author must have had large opportunities and great clinical advantages if the book is to be at all original, and these qualifications this author has to a marked degree. The information regarding the treatment of the various diseases is sound and has received general approval, and although incidentally newer remedies are frequently mentioned the author has included only those which appear likely to have a permanent place in practice. Many formulæ, adapted to the United States Pharmacopeia by Dr. Thornton, accompany the text.

The author is, perhaps, somewhat too conservative in the recommendation of drugs of recent origin and it would almost seem as if he were not quite up with the times. Too many new drugs of synthetical origin now find refuge in our practice, some of which are valuable, others worthless and foisted upon the profession by foreign manufacturers simply for commercial gain. The author has been quick to recognise this state of affairs and in his zeal to be trustworthy and reliable has omitted some of real value. The treatment is vividly described, the language plain and a book of such pretentions is sure to have a large sale.

The presswork and binding are excellent. W. C. K.

THE STUDENT'S MEDICAL DICTIONARY. Including all the words and phrases generally used in medicine, with their proper pronunciation and definitions. Based on recent medical literature. By GEORGE M. GOULD, A. M., M. D., Author of "An Illustrated Dictionary of Medicine, Biology and Allied Sciences," etc. Large 12mo. Eleventh edition, enlarged. Illustrated. Philadelphia: P. Blakiston's Son & Co. 1900. [Price, $2.50.]

This edition of this popular dictionary has been increased in size to the extent of over a hundred pages more than its predecessor. The author is an experienced maker of word books and is in touch with the needs of students in the premises. It is not difficult to discover even through a cursory examination that this work is especially adapted to the wants of medical students. Its size is admirable, it furnishes definition and pronunciation of all the terms that are in general use, while it is excellently illustrated and its tables are beyond criticism.

We regard it as one of the most convenient, compact and at the same time scientifically accurate of all the student's medical dictionaries afloat.

STRINGTOWN ON THE PIKE. A Tale of Northernmost Kentucky. By JOHN URI LLOYD, Author of "Etidorpha," etc. With illustrations. New York: Dodd, Mead & Co. 1900.

This may be termed a study of Kentucky character, the scenes of which are laid in a northern Kentucky hamlet, but ten miles away from Cincinnati. This region is in strong contrast to the blue grass section where are laid the scenes of James Lane Allen's stories.

The characters are such as belong to the region named, and barring the sometimes almost impossible dialect, it makes pleasant reading and a restful diversion for the medical man. Some of the chapters, too, such as 39 and 40, 55 to 63, and this final chapter possess professional interest. The story has been running through the *Bookman* since March, 1900, where it has attracted widespread attention on account of its literary merit as well as its attractiveness as a story. Its word pictures are strong, its dialogue amusing and its moral tone is high. The publishers have dressed it in attractive type. We commend it to our readers.

DIET LISTS AND SICK-ROOM DIETARY. By JEROME B. THOMAS, M. D., Visiting Physician to the Home for Friendless Women and Children and to the Newsboys' Home; Assistant Bacteriologist, Brooklyn Health Department. Philadelphia: W. B. Saunders & Co. 1900. [Price, cloth, $1.50.]

The work contains 169 detachable (perforated) diet lists for albuminuria, anemia and debility, constipation, diabetes, diarrhea, dyspepsia, fevers, gout or uric-acid diathesis, obesity and tuberculosis. Also forty detachable sheets of sick-room dietary, containing full instructions for preparation of easily digested foods necessary for invalids. Each list is numbered only, an index key being reserved for the physician's private use.

The doctor will find the book a convenient labor-saving device.

M. J. F.

THE PHYSICIAN'S VISITING LIST (Lindsay and Blakiston's) FOR 1901. Fifteenth year of its publication. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut street.

Few publications of any sort have reached their fiftieth anniversary, yet this popular visiting list enjoys that distinction. Moreover, it well merits any claim to honor on that account, for it is one of the most compact, convenient and best visiting lists published. It contains all that is needed for reference by the busy, practical, everyday doctor, in addition to the regular pages devoted to records of patients, arranged in weekly blocks. Those who have used it before will be sure to need it now and many many others will flock to its standard.

HEART DISEASE IN CHILDHOOD AND YOUTH. By CHARLES W. CHAPMAN, M. D., Durh., M. R. C. P. Lond., Physician to the National Hospital for Diseases of the Heart, Soho Square, W., etc. With an introduction by Sir Samuel Wilks, Bart., M. D., F. R. S., Physician Extraordinary to H. M. the Queen, etc. Duodecimo, pp. 101. London: Medical Publishing Co. 1900. [Price, 3 s. 6]

Dr. Chapman's book consists of a preliminary chapter on the causes, hygienic management and treatment of heart disease in childhood, followed by a detailed account of thirty-two selected cases. The volume is an excellent one, so good that the reviewer is tempted to quote at length from its pages. One who has any practice at all among children can not fail to be benefited by a persual of this volume, which is so clearly and carefully written that the reading of it is not a task but a pleasure.

M. J. F.

BACTERIOLOGY AND SURGICAL TECHNIQUE FOR NURSES. By EMILY M. A. STONEY, Superintendent of the Training School for Nurses, St. Anthony's Hospital, Rock Island, Ill., etc. Duodecimo, pp. 190. Illustrated. Philadelphia: W. B. Saunders & Co. 1900. [Price, $1.25 net.]

A somewhat extended experience in the operating room has convinced the reviewer that a subject exceedingly difficult for the nurse to grasp is the principles underlying aseptic and antiseptic surgery, and the reason for this seems to be an insufficient acquaintance with bacteriology. Doubtless others have had the same experience. To nurses who desire to perfect themselves in surgical nursing, and to surgeons who wish to place in the hands of their assistant nurses a book which will make plainer the reasons for the various routine procedures of the operating room this book is commended. M. J. F.

BOOKS RECEIVED.

Transactions of the State Medical Society of Wisconsin. For the year 1900. Fifty-fourth annual session, held at Milwaukee, June 20, 21 and 22, 1900. Charles S. Sheldon, M. D., Secretary.

Sanity of Mind. A study of its conditions, and of the means to its development and preservation. By David F. Lincoln, M. D., Author of "School and Industrial Hygiene," etc. Duodecimo, pp. 183. New York and London: G. P. Putnam's Sons. 1900. [Price, $1.25.]

Comparative Physiology of the Brain and Comparative Psychology. By Jacques Loeb, M. D., Professor of Physiology in the University of Chicago. Duodecimo, pp. 309. Illustrated. New York: G. P. Putnam's Sons. 1900. [Price, $2.00.]

Appendicitis and its Surgical Treatment. With a report of 185 operated cases. By Herman Mynter, M. D., Professor of Clinical Surgery in University of Buffalo, Buffalo, N. Y. Duodecimo, pp 231. Third revised edition. Philadelphia: J B. Lippincott Co 1900. [Price, $2.00.]

The Care of the Consumptive. A consideration of the scientific use of natural therapeutic agencies in the prevention and cure of consumption: together with a chapter on Colorado as a Resort for Invalids. By Charles Fox Gardiner, M. D., Member of the American Climatological Association. Duodecimo, pp. 182. New York and London: G. P. Putnam's Sons. 1900.

Quiz Compends. No. 16. A Compend of Diseases of the Skin. By Jay F. Schamberg, A. B., M. D., Professor of Diseases of the Skin, Philadelphia Polyclinic and College for Graduates in Medicine. Second edition, revised and enlarged. With 105 illustrations. Philadelphia: P. Blakiston's Son & Co. 1900. [Price, 80 cents]

Obstetric Clinic. By Denslow Lewis, Ph. C., M. D., Professor of Gynecology in the Chicago Polyclinic; President of the Attending staff of Cook County Hospital, Chicago. A series of thirty-nine clinical lectures on practical obstetrics delivered to students and practitioners in Cook County Hospital, Chicago. Octavo, pp. 640. Chicago: E. H. Colegrove, 65 Randolph street. [Price, $3.00.]

Diseases of the Nervous System. A text-book for students and practitioners of medicine. By H. Oppenheim, M. D., Professor at the University of Berlin. Authorised translation by Edward E. Mayer, A. M., M. D., Pittsburg. First American from the second revised and enlarged German edition. Large 8vo, pp. 899. With 293 illustrations. Philadelphia and London: J. B. Lippincott Co. 1900

Therapeutics: Its Principles and Practice. By Horatio C. Wood M. D., LL. D., Professor of Materia Medica and Therapeutics, and Clinical Professor of Diseases of the Nervous System in the University of Pennsylvania; and Horatio C. Wood, Jr., M. D., Demonstrator of Pharmacodynamics in the University of Pennsylvania. Octavo, pp. xxxiii.—85[illegible]. Eleventh edition, remodeled and in greater part rewritten. Philadelphia and London: J. B. Lippincott Co. 1900.

Food and the Principles of Dietetics. By Robert Hutchison, M. D., Edin., M. R. C. P., Assistant Physician to the London Hospital and to the Hospital for

Sick Children, Great Ormond street. Octavo, pp. 566. With plates and diagrams. New York: William Wood & Co. 1900.

Laboratory Directions for Beginners in Bacteriology. An introduction to practical bacteriology for students and practitioners of comparative and of human medicine. By Veranus A. Moore, B. S., M. D., Professor of Comparative Pathology and Bacteriology, New York State Veterinary College, and of Bacteriology, Cornell University Medical College, Ithaca, N. Y. Duodecimo, pp. 159. Second edition, enlarged and revised. Boston: Ginn & Co. 1900. [Price, $1.05]

Nineteenth Annual Report of the State Board of Health of New York. Transmitted to the legislature February 13, 1899. With accompanying maps. New York and Albany. 1900.

The Treatment of Fractures. By W. L. Estes, A. M., M. D., Director and Physician and Surgeon-in-Chief of St. Luke's Hospital, South Bethlehem, Pa. With numerous original illustrations. New York: International Journal of Surgery Co. 1900. [Price, $2.00.]

Progressive Medicine. Volume IV. 1900. A quarterly digest of advances, discoveries and improvements in the medical and surgical sciences. Edited by Hobart Amory Hare, M. D , Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, handsomely bound in cloth, 428 pages, 69 illustrations. Philadelphia and New York: Lea Brothers & Co. [Per annum, in four cloth-bound volumes, $10.00.]

A Manual of Surgical Treatment. By W. Watson Cheyne, M. B., F. R. C. S., F. R. S., Professor of Surgery in King's College, London; Surgeon to King's College Hospital, etc.; and F. F Burghard, M. D. and M. S. (Lond.), F. R. C. S., Teacher of Practical Surgery in King's College, London; Surgeon to King's College Hospital, etc. In seven imperial 8vo volumes, with illustrations. Volume IV., 383 pages with 138 illustrations. Philadelphia and New York: Lea Brothers & Co. 1900. [Cloth, $3.75 net.]

LITERARY NOTES.

MESSRS. BATTLE & Co., of St. Louis, have issued chart No. 2 of the series illustrating fractures of the large bones. The subject of this number is oblique fracture of the shaft of the tibia. It is well drawn and the muscles in color make the work effective.

A CONTRIBUTION to the therapeutics of Pepto-Mangan, Gude, is the title of a paper by Dr. Ludwig Pohl, city physician, Vienna, Austria. It was originally published in the *Aerztlicher Central Anzeiger*, Vienna, and is reprinted and sent out by Messrs. M. J. Breitenbach Co., agents for the American continent of Pepto-Mangan, Gude. Dr. Pohl gives reasons in detail for the benefits derived from this preparation where iron is indicated in an easily absorbable form. He regards it as an excellent preparation and one that bids fair to occupy a permanent place in the materia medica.

MESSRS. D. APPLETON & Co. announce that they have in press A Text-book of Gynecology, edited by Charles A. L. Reed, A.M., M.D., president of the American Medical Association; gynecologist and clinical lecturer on diseases of women in the Cincinnati Hospital, etc. This work is an exposition of the practice of medicine, in its broadest sense, as applied to diseases peculiar to women.

It will shortly be issued in a single 8vo volume of nearly a 1,000 pages, illustrated with about 400 original drawings by Mr. Roy J. Hopkins. It will be sold at $5.00 in cloth, and at $5.50 in Appletons' Medical Library style.

THE *Western Reserve University News Letter* is the title of a leaflet issued weekly by the Western University, at Cleveland, O. Its object is to give the public authentic notes regarding the University. The subscription price is 25 cents a year, but it will be sent as an exchange to any editor who may express a desire to receive it. It is a novel idea and will undoubtedly prove beneficial to the University.

ITEMS.

SCOTT & BOWNE have presented us with their New Twentieth Century Calendar and memorandum for 1901. It is one of the most convenient articles of desk furniture and is a daily reminder of the value of Scott's emulsion as a nutritive and reconstructive agent.

THE Columbia Calendar for 1901 is placed upon our desk promptly by the American Bicycle Company, dealers in Columbia and Hartford cycles. It is unique in many respects, the sentiment for each day being supplied by bicycle riders. Send 10 cents in stamps to the Company, at Hartford, Conn., and get one.

THE Unique Card Index System of accounts, case records, therapeutics, advances in surgery and allied sciences is issued by the Technique Publishing Co., of New York. Information concerning it will be supplied upon application to the Company.

THE Antikamnia Calendar for 1901 has come to hand. It is issued in four tablets, each sheet containing a calendar for three months and each is illustrated with a skeleton sketch, painted in water color by the late Dr. L. Crusius. These four are the last of the "sketches" left by Dr. Crusius at his death. They are remarkable specimens of an art that is unique—that of giving life-like facial expression to the human skull.

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Original Communications.

SOME SUGGESTIONS IN USING BROMIDES IN EPILEPSY.[1]

BY L. PIERCE CLARK, M. D.,
First Assistant Physician, Craig Colony for Epileptics, Sonyea, N. Y.

SINCE the introduction of the bromide salts in 1851, by Locock and McDonnell, their use in the treatment of epilepsy has had a varying fortune. Some maintain that they should be used only after all other remedies have been tried, and others still claim that they are really the only remedies we have for the disease. Between these two extremes of opinion we have varying views. Undoubtedly the perfunctory administration of bromides has been productive of great harm. The train of their evil effects is too well known for me to detail them; instead, I propose to give some experience of my own with the bromide salts.

I hope it will be understood at the outset that I regard the bromides as but one of the many drugs to be used in recovering epileptics from their disease. The modern conception of the disease demands that much be done unremittingly for the possible amelioration of the predisposition which really underlies all the epilepsies. All agencies for the physical and mental regeneration of the epileptic must be evoked in every case. I regard bromides as one of our great drug adjuvants for the curative treatment of the disease. Until the seizures are stopped we cannot hope to successfully invoke other far-reaching and more telling methods. Above all other considerations, the seizures must be stopped; bromide is the drug par excellence for this phase of the disease. The cortical stability of the epileptic once assured, many things are then possible. With this prefatory remark on my position, I will take up the title of the paper.

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[1] Read at the thirty-third annual meeting of the Medical Association of Central New York, held at Rochester, N. Y., October 16, 1900.

Epileptics and their relatives expect physicians to give medicines at once which will lessen the frequency and severity of the spasms; therefore, too little attention is generally given in the beginning to a careful case study of the digestive tract and its tolerance of the bromides. If the patients are anemic and have the epileptic physique or dyscrasia, we must try to build up the organism while administering bromides. I almost always give iron tonics and cod liver oil to epilpetics, either to correct existing mal-nutrition or forestall the effects of the bromides. I consider this adjuvant treatment as important to the bromides as the diet and the general living regimen. The bromides may be given at once. I use the following well-known formula, which I am persuaded is the best:

ELIXIR OF THE TRIPLE BROMIDES.

℞ Potass. bromid.
Ammon. bromid.
Sodii bromid. . . . . āā gr. v.
Elixir simplex, q. s. ad. . . . . ʒi.
M.

This preparation is given because it is palatable and contains the dynamical effect of 15 grains of bromide to the drachm, an easy and convenient unit to work upon in further bromide treatment. The patient is begun on one drachm a day at the outset, given night or morning, according to whichever end of the day the seizures occur most frequently. This is kept up for a week or so, until the sedative power of the single dose can be determined, and then successive drachms are added as thought necessary, until the seizures cease or 480 grains or one ounce of the salt is taken. The giving of bromides of late has been in too small doses to gain antispasmodic effect. The amount should be sufficient to stop the seizures. The same care and attention should be exercised in giving bromides in the different cases as though we were handling a new drug each time.

Every possible precaution in the prevention of bromide intoxication must be taken. The epileptic organism must be kept in the highest possible functionating state. Hot and cold baths, massage and electricity should be given. If the patient has a good physique, I order a prolonged hot bath twice each week on retiring. I order a cold shower bath and a friction rub every morning on rising. If the patients cannot stand the shock, a cup of coffee or hot milk is given them in bed before the bath, and if the shock is still too severe they should lie down until the reaction takes place; a hot drink after a cold bath materially aids the rapid reaction. No alcoholic stimulants, as a rule, should be allowed in connection with these cold shocks. Put just as little dependence on hot drinks as possible, and insist upon neurotic patients themselves making efforts to favor the reaction. I regard these cold baths in the morning as vital to maintenance of a good peripheral circulation, to physiological awakening of the organic tissues.

The bowels must be watched, the diet must be prescribed; high rectal saline douches should be given once or twice each week. The mouth must be kept scrupulously clean. Internal antiseptics should be given at stated intervals, and if the face shows the effects of the bromide intoxication, cloths wrung out of hot water may be applied to the face to relax the tissues and aid the circulation in taking up the bromide deposits. This skin treatment should be followed nightly for fifteen to twenty minutes; the last moist heat application should be a hot saturated solution of boracic acid, and a final application of zinc ointment should end each night's treatment to the face. I have never seen a case of acute or chronic bromism of the skin which would not to a great extent yield to this treatment, when the other factors in bodily hygiene were faithfully looked after. It is absurd to look to Fowler's solution of arsenic to remove bromide intoxication when the care of administering bromide is neglected.

Having stopped the seizures by large doses of bromide, the work of treating the epilepsy has only begun. The dosage must be maintained for as long a time as possible without intoxication. Only so much bromide is effective as the tissues will absorb and hold; the longer time the greater amount they can be made to maintain the better. Not infrequently the patient is left to himself at this stage of bromide treatment, and he soon disregards the laws of hygiene, and bromide intoxication follows swiftly. The seizures occur more frequently than before and the patient's life is saved by some physician withdrawing the bromides. Cases in which the care of administering bromides is neglected, form no small part of those said to stand the bromides poorly. Epileptics taking bromides in large doses should be under the careful supervision of some competent person, and be seen by a physician at frequent intervals. While establishing the dosage for any particular case, the physician should see the patient two or three times each week; every day is better. After the individual regimen is established thoroughly, the patient may go two or three months without a consultation. Not infrequently after the bromide dosage has been adjusted to the seizure level, epileptics will suddenly surprise the physician by having two or three seizures just at the active or second phase of treatment is begun. The explanation is simply this: the patient, from being a passive agent, from living a sedentary life, is started on an active out-of-door life for the establishment of a real and permanent cure if possible. The patient's bodily activity increases and hastens the elimination of the bromide salts, and the seizures recur. Add 15 to 30 grains to the dose in changing the patient from a sedentary to an active out-of-door life.

Of late when cases will not stand the bromide salts in high dosage, I give bromide in the following simple formula:

TEN PER CENT. BROMINE.

℞	Ol. sesamum	℥ix.
	Bromine, pure	℥i.

M. S.—℥ss. night and morning; increase as directed.

Or, in this emulsion, which I have found both more highly nutritive and sedative:

EMULSION OF BROMINE.

℞	Ol. sesamum	℥viii.
	Gum. acacia gran.	℥ii.
	Syr. simplex	℥ii.
	Ol.Gaultheria	mlx.
	Aqua	℥vi.

M. Ft.—Emulsio. Add bromine, pure, gr. dcccclx. S.—℥ss. night and morning, increase as directed.

(Sample of emulsion submitted.)

Or it may be combined in this emulsion with potassium bromide, in order that the pure bromine will not be lost by fuming. The vegetable oil may be changed for pure Norwegian cod liver oil:

EMULSION OF BROMINE, MODIFIED.

℞	Gum. acacia gran.	℥ii.
	Ol. sesamum or ol. morrhuæ	℥viii.
	Aqua	℥vi.
	Ol. Gaultheria	mlx.

M. Ft.—Emulsio. Add bromine, pure, grs. dcccclx. Potass. bromide, grs. cccclxxx. ℥ss. bromine, grs. xxx. Potass. bromide, grs. xv. S.—℥ss. night and morning, and increase as directed.

(Sample of emulsion submitted.)

Bromine given in this manner is less irritating to the intestinal tract, is not constipating, is markedly less toxic, and seems to be much more lasting in its effects. It should be given a more extensive trial, especially where the single or combined bromide salts fail. In making the bromine mixture the druggist needs to be quick in adding the bromine to prevent loss from fuming. In giving bromine, please consider 1 gr. by weight of bromine as equal to 2 grs. of bromide salts from a therapeutic standpoint.

I have reserved to the last to speak of what I regard as without doubt the greatest adjuvant to the bromides discovered in recent years. It is a method which I am now using successfully on several epileptic patients, and which is known technically as hypochlorisation or salt starvation. This method was brought forward by Toulouse last year, who reported a series of very successful trials and more recently several continental physicians have reported favorably. Its rationale is simply that bromine can substitute chlorine in the tissue. Experiments upon dogs and cats fed for ten days upon bromine, showed that more bromine could be procured from their remains than chlorine. In the kidneys and bone marrow the proportion was two to one. Bromine is not a foreign substance, but a true mineral constituent of the body; when discontinued it is replaced by alimentary chlorine and requires about four months for its complete elimination. It is therefore evident that bromine may partly replace chlorine chemically and physiologically as well. Linossier, a French neurologist, in investigating the subject upon animals found that in the gastric juice, the chlorhydric acid could be replaced by bromhydric acid. Thus, it is seen that we have a good basis for the clinical fact that when an epileptic is under salt starvation, the bromides are more greedily absorbed in the tissues. It is always the amount of bromides which the tissues will hold that determines the efficacy of the bromide medication; therefore we can at once see how very important this method is in the treatment of epilepsy. Nearly all epileptics are very fond of salt, and eat large quantities of it, and in consequence it is difficult to get many of them to undergo voluntary deprivation of salt. So a semi-starvation of salt is about all that can be expected from them. One of the best and easiest ways of carrying out this adjuvant of the bromides, is the establishment of a milk diet with occasional removals to a mild salt diet. For a long time it has been known that a milk diet assists much in lessening the formation of toxic substances in the alimentary tract. To aid the carrying out of the salt starvation treatment, in which a relapsing diet is necessary, or an accompanying semi-starvation diet is desired, I have modified Toulouse's daily dietary so as to give the following:

BREAKFAST.—Milk, 1 pint.
LUNCH.—Two cakes made of eggs, farina, milk and sugar; coffee.
DINNER.—Bouillon, unsalted; boiled beef, unsalted; potatoes.
SUPPER—Porridge made with farina, sugar, boiling milk, etc.

By this method we can reduce the usual amount of bromides one-half and still get the same results while lessening the chance of bromide poisoning one-half. The economy of this method is obvious both in epilepsy and other diseases where sedation is needed over a long period of time. Many practical points still remain unsolved in hypochlorisation, but sufficient has been proven to warrant us in giving the method extended trial in connection with the bromide treatment in epilepsy.

These large doses of bromides should be continued for several weeks after the seizures stop; then week by week, reduce the bromides 15 grs. per week, until you get to the seizure level again and let that dosage remain to suppress the convulsions. Then, and not until then, can we consider our patient free from the first phase of hospital treatment. Arrangement should now be made for daily exercise, school, manual training, and other occupations of life, preferably in the country and at agricultural pursuits; physical activity should be maintained for several hours daily.

Some illustrative cases under high dosage of bromides may be cited here. The cases were either those that had not been helped by bromides or other medication, or, those in whom bromides were not given to the point of desired therapeutic effect, on account of a rapid and dangerous toxicity developing. Precautions enumerated in this paper were not undertaken heretofore.

Case I.—Girl, 17 years old; idiopathic epileptic; ordinary medication did not influence seizures. Had on an average 250 grand mal and petit mal attacks per month. Bromides were given according to the methods stated in this paper. The seizures were not modified until 200 grs. daily were taken; they then occurred 40 times per month; the next month on 300 grs. they dropped to 4 attacks, and under 480 grs. daily the attacks ceased altogether. Patient has had only a half dozen slight losses of consciousness for the past 18 months. She is now taking 240 grs. daily, and is in excellent bodily and mental health, has grown 5 inches taller, and gained 12 pounds in weight during the past year. Although bromides are counted unhygienic, the seizures in this case must have been very detrimental to growth and development.

Case II.—Traumatic epileptic; trephined. Epilepsy continued and all drugs, including ordinary doses of bromides, failed. Patient had 12 to 14 grand mal seizures per month. Bromides were gradually given until 280 grs. per day were taken. The seizures ceased entirely and have not showed themselves for six months. Patient is improving mentally and physically—is practically a new man. He takes 180 grains daily and shows no bromide intoxication, not even a facial acne.

Case III.—Man, 26 years old, an idiopathic epileptic with psychical seizures consisting of but momentary losses of consciousness; never had convulsions. Epileptic for 20 years; had never found a remedy that could affect the regular periodicity of the psychical series until placed on bromides. He is now on 160 grains daily and has had no attacks whatever for over four months. There has been a very remarkble improvement physically and mentally. Slight facial acne and general bromic toxicity occurred two or three times, but were easily corrected. No one would now know that this patient ever had taken or was now taking bromides by his facial or general appearance.

In conclusion I would summarise as follows:

1. Bromides still hold a very important place in epileptic treatment.

2. Tonics must be given constantly while administering bromides.

3. Bromide salts should be given gradually to find the epileptic's sedative level.

4. Baths, high enemas, alimentary antiseptics, massage and electricity are absolutely essential to successful bromide medication.

5. Bromine is a worthy successor to the bromides in many cases.

6. Salt starvation or semi-salt starvation is a great adjuvant to the bromide treatment.

DISCUSSION.

Dr. Lester, Seneca.—In the treatment practised by ordinary physicians in these cases of epilepsy, bromides are very unsatisfactory. I have come to the conclusion, after a period of thirty-five years in trying to cure, or trying to get rid of epilepsy, that the less bromides you give, the better. They seem to keep the fits back till they have accumulated something like the electricity in a Leyden jar, and then they begin to go off and they will have twenty-five or thirty right along and exhaust the patient. A young gentleman from Florida that I had treated about twenty-two years ago, and had not been at home since I treated him. He was having epilepsy; had it while he was here. I wanted him to go up to the Craig Colony and have a talk with one of the physicians while he was here. He said he had learned all about his epileptic case that he wished to know from doctors. He said, "I know when they are coming on and they go off after a little while." Said he, "if I should take bromide, I could go four months or five months without any fits, then they are awful; I know nothing for several days; I have ceased any treatment of that sort." Now he is able to do all his work and it is more than twenty years since he came to me, and I used to give him bromide. He has never had his faculties disturbed one particle. All the epilepsy he has had has never disturbed his faculties. He keeps a double entry set of books.

Dr. CREGO, Erie.—This reminds me very much of a man driving an automobile. A fellow pulls the lever and if he steers just right, it will go all right; but if he don't steer just right, it is likely to go up a tree or in the river or any place like that. So, if you give bromides, according to Dr. Clark's ideas, you will have success in treating these cases. You must give tonics, you must find out the normal quantity that you want to give this certain patient. If you give him bromides hap-hazard, you won't have any results.

In addition to the remedy which the doctor passed around first, I usually use bromide of zinc, one-eighth of a grain, in addition to the other bromide, and get very good results in the treatment of a certain class of patients. I don't know as I can say exactly what class of cases I give that to, but I have an idea of my own and I can tell the cases where I give one bromide or the other bromide or two bromides. I don't know whether Dr. Clark has the same idea or not, that the character of the epilepsy or the convulsion, or something in the study of the case, gives one the idea, whether to give just one bromide or several, or a combination. If you use these remedies intelligently, you will have results in about 30 per cent. of all your cases, if not 50. If you continue the remedy two years after the last attack in a sufficient dose, I think, in about 30 to 50 per cent. in all cases of epilepsy, where there is no depression of the skull, or no mal-formation, you will have a recovery, if you pursue the treatment correctly.

Dr. CHEESMAN, Cayuga.—I would like to ask Dr. Clark if he is having success in operating for epilepsy, or if he has done any such work at the asylum?

Dr. CLARK.—I would say in answer to the last question, we have done a number of trephinings, but we have found, in a great majority of cases, that it simply relieves the intracranial pressure and consequently a slight cessation from seizures for a time may occur. Unless additional medical treatment is employed, I don't believe trephining or operation for epilepsy would be of value. The additional attention needed is from the physician. Too often the surgeon is impatient. He performs the operation, and as soon as the case recovers from that, he sends it away, just at the time when they need most attention. I think, as Dr. Crego said, that one can get in the habit of finding out whether the patient needs the one bromide, the two bromides or three bromides, by some sort of an intuition. I suppose that comes from seeing a great number of cases.

I wish to call your attention to the fact that I have the photograph of a girl who has been taking 480 grains of bromide a day for over two years, and has changed from having 300 or 400 seizures a month, to that of having none; slight losses of consciousness occur infrequently. In addition to that fact, the bromides have not destroyed the physique, but the patient has grown five or six inches taller, has gained in weight and grown less anemic under the bromide. If this patient were not given the attention which I maintain is absolutely essential to the high doses of bromide, we would not have these excellent effects from the bromide in this case.

SOME REFLECTIONS ON THE TREATMENT OF RHEUMATIC MANIFESTATIONS.

By H. A. RICHY, M. D., New York.

IN THESE days of scientific research the term rheumatism is still an indefinite one, and is applied to a group of painful affections due to different toxic agents. Formerly, it was believed that every form of rheumatism was caused by an excess of uric or lactic acid circulating in the blood. It was further believed that a rheumatic diathesis, inherited or acquired, played an important part in the causation of the disease. Looking at this subject from a modern standpoint it cannot be denied that there are persons who, owing to heredity or more often to an improper mode of living, are particularly predisposed to manifestations of a rheumatic type. Dietary indiscretions, abuse of alcohol, persistent exposure to dampness and cold; all may be predisposing and exciting causes. It is probable that the rheumatic virus, whether it be uric acid, lactic acid, or some other toxin, is generated in consequence of malassimilation and faulty metabolism.

While these theories satisfactorily explain the etiology of a certain number of cases, in others we must search elsewhere for an explanation of their origin. Bacteriology has to a great extent elucidated this question. Although no specific germ has been discovered, the theory of an infectious origin of certain types of rheumatism has been established upon a firm foundation. This is true particularly of those very acute and severe cases of articular rheumatism in which the effusion assumes a purulent character, the pathogenic organism being probably a staphylococcus or streptococcus. It is also interesting to note in this connection that the gonococcus and its toxins are the direct cause of the condition known as gonorrheal rheumatism, the organism having been found in the affected joints and in other fibrous structures.

Rheumatism is a disease of common occurrence in the United States, particularly in the region along the Atlantic coast. Its principal symptom is pain, usually located in one or several articulations. When the disease first attacks some other part of the body, the diagnosis can only be reached by a careful investigation of the patient's history.

In treating rheumatism a limited number of physicians still adhere to the old theory of a lack of alkalinity of the blood, and for this reason employ the salts of potassium, sodium or lithium. With most practitioners, however, salicylic acid, or better, sodium salicylate, seems to be the main standby and is considered as a true specific. Unfortunately, sodium salicylate is by no means a safe drug. Though it promptly suppresses the pain; on the other hand, it gives rise to very disagreeable and even dangerous sequelæ, such as irritation of the stomach, heart weakness, dizziness, ringing in the ears, and the like. To my knowledge, many a case of pericarditis has been brought on by the injudicious use of this remedial agent. In consequence of the objectionable effects just enumerated, when salophen was introduced into the United States, with the recommendation of prominent foreign authorities, I decided to make a trial of it in my next cases. Its superiority over the salicylate of sodium became immediately apparent. The chemical name of salophen is acetylparamidophenol salicylic acid ester. It appears in the form of colorless crystals, almost tasteless, insoluble in water, but freely soluble in alcohol. It is best administered in wafers, or simply dropped on the tongue. It passes unchanged through the stomach, and in the intestines it separates into salicylic acid and acetyl paramidophenol, the latter having antipyretic and analgesic properties, and supplementing the action of the salicylic acid. The separation is probably very gradual, as the salicylic acid which is formed causes no untoward symptoms whatever, the action of the drug being antirheumatic, antineuralgic and antipyretic at the same time. In severe cases of rheumatism salophen may be given in doses of fifteen grains every two hours for a number of days without provoking complaints of disturbed functions. At times it causes a profuse perspiration, which, however, is more beneficial than weakening.

The following two cases are selected from my records to illustrate the gratifying results produced by salophen:

Case I.—B.R., American, 28 years of age, usual health excellent; no previous history of rheumatism or specific infection. His father and mother are still living; they never suffered from rheumatism;

he himself is a moderate drinker. The patient had been ill for a week, and under the care of a physician when I was called to see him. He had some fever and complained of pain in the chest and left arm, with embarrassed breathing. His wife stated that while he was quiet in the day time, at night he was delirious and could hardly be restrained from leaving his bed. Examination revealed the existence of pericarditis; endocarditis was apparently absent. Suspecting that a great deal of the trouble was caused by the large doses of sodium salicylate which the sufferer was taking, I stopped the medicine, and substituted in its place some dry champagne wine, with a substantial nourishment. On my visit the following morning, I was pleased to hear that the patient had spent a quiet night. On the next day the action of the heart continued to improve, and I prescribed salophen in ten grain doses, every three hours, and a tonic. In one week's time the man was fully convalescent, and no relapse occurred to delay a complete cure.

Case II.--Mrs. M. B., Irish-American, 32 years of age; no previous history of rheumatism. She had always been active and strong until December, 1898, when after taking care of two of her children during a long stage of illness, she became much exhausted and unable to attend to her daily duties. On January 1, 1899, she felt very ill and applied to me for help. She complained of sore throat and difficult breathing; her temperature was 103½°. With my finger I could detect the existence of an abscess in the right side of the neck. The patient being in a state of great misery, I called again on her in the evening. Her dyspnea was so severe that I was obliged to make deep scarifications. A dose of fifteen grains of salophen was also given with an happy effect, as the temperature fell off, and the sufferer was made more comfortable. On January 4th, I opened the abscess, and left her with the expectation that she would soon get well. To my surprise the next morning, she began to develop a severe attack of articular rheumatism. Her temperature went up suddenly to 104½°; her tongue became dry, and her lungs congested. She complained of excruciating pains in all the articulations of the left arm and leg. Salophen was then prescribed in doses of fifteen grains, every two hours, the daily dose being limited to ninety grains. This treatment was continued until January 10th, the heart meanwhile remaining undisturbed by the medicine; the stomach in good condition. No pain was felt by the patient unless some of the affected joints were touched. January 11th, her left side was entirely free from pain, while the right arm became suddenly involved, the fever showing some exacerbations. Salophen, which had been reduced to ten grain doses, every three hours, was given again in doses of fifteen grains every two hours. January 12th, the disease assumed a decidedly milder aspect; the temperature went down to 100°; the urine became clear and normal; the tongue cleaner and moist. Severe pain was yet felt at different intervals during the following week, but on January 21st the patient was well enough to dispense with her medical attendance. A simple blood tonic and a few eight grain doses of salophen, three times daily, entirely restored her to health.

During the first months of last winter, in November and December, 1899, an epidemic of influenza raged in New York City. Most of the cases showed above all rheumatic symptoms. As a rule, the disease was not dangerous to life, but its manifestations were rather severe. The attack came on with a chill, followed by fever, pain in the limbs, congestion of the throat and lungs, marked drowsiness; in fact, the complete chain of symptoms which indicate a severe illness of an infectious type. My rule was to put the patient to bed and give him at once a dose of fifteen grains of salophen. A profuse perspiration would invariably set in within a short time, which was aided by warm drinks, and covering the patient with blankets. A few doses of salophen sufficed to complete the cure. The patient was generally able to return to his work after three or four days of rest, the attack having subsided very quickly and leaving no sequelæ beyond a little weakness.

In headaches dependent upon a rheumatic diathesis, in neuralgias due to excess of uric acid in the blood, salophen has been used to advantage by me, after other remedies had failed to give relief.

In a severe case of sciatica which had resisted different drugs, the pain was greatly diminished by several doses of salophen. Unfortunately, the patient, who was a commercial traveler, was compelled to leave New York where he had been detained by his illness, and I am unable to state whether the improvement was permanent or not.

In every case of tonsillitis, in most attacks of sore throat, attended with muscular soreness, salophen may be considered as a specific. To small children I administer the powder mixed with a little sugar, so that the medicine is taken just as readily as a dose of calomel.

In the treatment of scarlet fever, salophen has regularly given encouraging results. It reduces the soreness of the throat to a minimum, and controls the fever without producing depression. The rheumatic manifestations so generally met with in this disease are very slight, if the drug is given at the beginning of the illness. To a child six years of age, three or four grain doses can be administered with entire safety. When there exists a feeling of depression tincture of iron may be added to the treatment.

161 EAST 46th STREET.

DERMATITIS EXFOLIATIVA.

By WILLIAM A. HOWE, M. D., Phelps, N. Y.

THE subject which I have chosen to present for your consideration on this occasion, is one which belongs to the domain of the dermatologist rather than to that of the general practitioner. The highly interesting experience which has fallen to my lot with this disease, furnishes my only apology for entering this field of special work in which I am so consciously inefficient. That the task is no easy one is fully appreciated; that others may do it far better justice is freely admitted; that your liberal criticism may prove conducive of some good, is hopefully anticipated.

To me, as I dare say to most of you, this disease has been of rare occurrence. In only three instances, during the last twelve years, has it come under my observation, and then, strange as it may seem to some of you, not until several months after one patient had died from it, and five years after the first case was seen, was I able to make a positive diagnosis.

Two of the cases appeared in the same individual, four years apart; the third one in a child three years of age. In all three of them, the cutaneous and constitutional symptoms were very severe in character and persistent in duration. That of the child resulted in death, the other two in recovery.

Those having a favorable issue so closely resembled each other in every particular that to attempt to describe them separately would only result in a needless repetition. This paper, therefore, will contain a review of only one of the two attacks from which the patient suffered.

My decision to report these cases has been influenced by several considerations. Foremost among them is a desire to increase the number of such cases recorded, hoping, in a measure, to encourage a more exhaustive study of the subject, and a more comprehensive knowledge of its real nature. Its rarity should certainly offer no excuse for its neglect. On the contrary, it should stimulate on our part a still greater determination to search out every possible case, and study it in detail.

Strange as it may seem, many of our standard text-books on dermatology are sadly deficient in their treatment of this interesting disease. Some of them devote practically no space to its considera-

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1. Read at the thirty-third annual meeting of the Medical Association of Central New York, held at Rochester, N. Y., October 16, 1900.

tion. Others, though more liberal in their treatment of the subject, still fail to furnish the detailed description which one might reasonably expect to belong to a disease capable of assuming such severity. Though comparatively rare to the dermatologist, it is particularly so to the general practitioner. To such of us as follow our vocation in the rural districts, far fewer opportunities are offered for observing rare forms of disease, and greater difficulty is often experienced in correctly diagnosticating them. For that reason the country practitioner, more than all others, is dependent upon his library to assist him to properly diagnosticated these obscure, perplexing cases.

Though the writer has within his library three standard text-books devoted exclusively to venereal and cutaneous diseases, none of them enabled him to arrive at a positive diagnostic opinion when the disease first presented itself for solution. I admitted candidly to the family that I had never before seen anything exactly like it; that the records at my disposal did not give its parallel, and that, further than its being some violent form of dermatitis, I could not say. Fortunately, for my retention in the case, this seemed to satisfy the family, and I continued in its management. Inasmuch as it pointed to a favorable end or recovery, the family did not deem it necessary to call another physician in consultation. In the second case, however, two consultants were called. Both were general practitioners, of many years of wide experience. To them, as to me, the disease was baffling. Our united efforts availed nothing, the patient succumbing after six weeks of almost indescribable suffering. It was not until my third case was well on its road to convalescence, that I succeeded in obtaining a correct diagnosis of this strange malady. For this valuable information I am indebted to Dr. E. Wood Ruggles, of Rochester, whose familiarity with the disease enabled him to quickly recognise it.

Not only were these cases extreme in their severity, but of a shorter and more defined course than is generally expected in this disease. Many other cases are attended by far less disturbances than were those which furnish the data for my report.

Do we recognise these milder ones as such, or do we, as might easily be done, include them in some of the exanthemata? I am not prepared to state positively whether I have ever seen more than these three cases. It is more than probable that I have, but failed to recognise their real nature, and thereby wrongly diagnosticated them.

Most of you, like myself, have undoubtedly seen eruptive diseases, in which you were never fully satisfied as to their positive diagnosis.

Some you may perhaps have called a case measles, some scarlatina, some erythema, and yet down in your own conscience a grave doubt existed as to just what you were dealing with. The fact that in many of these cases frequent exposures were given to children with no contagion only added doubt to doubt in your already unsettled mind.

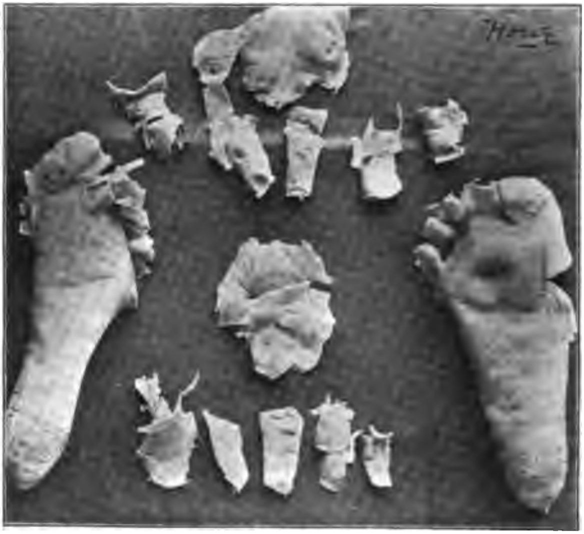
Might it not be possible that some of these noncontagious cases should be found to be a mild form of dermatitis exfoliativa? Should we not be more vigilant in watching for this disease, and endeavor more frequently to differentiate it from those conditions for which it might easily be mistaken?

Cases I. and II.—H.F.B., male, aged 44 years, married. Father died at 71, with diabetis mellitus; one brother at 24, and one sister at 43, with the same disease. Mother died at 70 with dilatation of heart. Except these three cases of diabetis mellitus, his family history is good. The subject of this report is a farmer by occupation and always has been. He is of exemplary habits, naturally strong and active, and except the two attacks, which furnish a portion of the data for this report, he has never experienced any serious illness. He was prostrated by the first in March, 1895, and by the second in December, 1899, and January, 1900. During the fall of 1899, or just preceding his last attack, he complained of unnatural dryness of the skin, with more or less itching and burning. This was particularly noticeable on the hands and feet. No constitutional symptoms were present during this early prodromic period. These first manifested themselves on December 20, 1899, at which time he complained of slight vertigo on rising in the morning, headache, anorexia, indisposition to work, more or less exhaustion, chilly feelings, aches and pains in back and extremities, increased dryness of the skin, great itching and burning, and an apprehension of some impending sickness of a severe nature.

These premonitory symptoms rapidly grew worse and others were soon added. Within forty-eight hours of the advent of the early symptoms, the man was profoundly sick. He was now completely prostrated in bed. The itching and burning of the skin now involved the entire body, as did also a deep erysipelatous eruption. These were very severe and pronounced in their character. The face was so swollen and edematous, that it was with difficulty that he could see out of either eye. His facial features were so distorted that his most intimate friends would scarcely have recognised him. He was delirious, muttering incoherently, picking at the bedding and extremely restless.

Though now covered with a severe dermatitis and exhibiting such severe constitutional symptoms, his temperature registered only 101° and his pulse was normal. In fact, throughout the entire disease his pulse did not rise much beyond 72 and 102 2-5 was the highest point reached on the temperature chart. This was on the third day of the disease, by which time his hands and feet were so badly swollen as to make it almost impossible to move them. This intense inflammation continued with no abatement until December 25th, at which time occurred a slight amelioration of its severity.

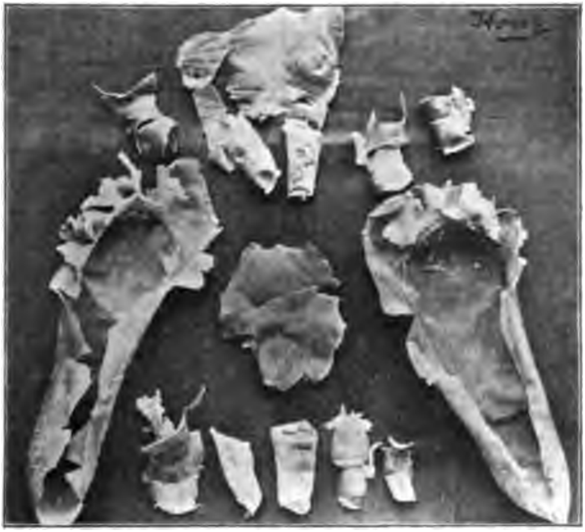
Coincident with this seeming improvement, came an increase in the swelling, which produced almost intolerable suffering, So great were the pain and itching which attended this condition that opiates were necessarily given freely to relieve these distressing symptoms. The next day, the deeply reddened skin began to present a dried, dead appearance and crack open in many places. This evidently arose from the destructive influence of the intense inflammation on the vitality of the skin, together with the distension accompanying it.



HOWE: DERMATITIS EXFOLIATIVA—EXTERIOR VIEW.

It was at this time, or on the sixth day of the disease, that the first exfoliation occurred. This was at first slight, but like the other symptoms, rapidly increased until the man was actually skinned alive. Indeed, in certain portions of his body, a secondary exfoliation occurred, which added not a little to his intense suffering. By December 27th, extensive surfaces were exfoliating. On this day the entire palm of the thumb came off en masse. The character of the exfoliated skin varied materially in different parts of the body. In some places, especially on the face, it would be fine and bran like; in others, as on the trunk, it would roll up in great sheets, while in others as on the hands and feet, it would be thrown off in a perfect cast.

This last feature of the case has been of particular interest to me. The specimens obtained have been preserved and are exhibited for your inspection; also, a photograph of their exterior and interior surfaces, taken soon after their removal. They were all exfoliated between the seventh and fourteenth days of the disease. Some of the fingers you will notice were stripped off, much as you would turn the finger of a glove inside out. Those of the soles of the feet were removed by making an incision along the superior surface of each toe and slipping off the epidermis, as you see it in the specimens. You will also notice that they are still, more than nine months since their removal, in a state of excellent preservation. Nothing has been applied to them in the meantime, nor has any effort whatever been made to insure their keeping. How long they will retain this power of self-preservation I am unable to say, but a similar specimen exfoliated by this same person five years ago, is still in my possession and shows no sign whatever of disintegration.



HOWE: DERMATITIS EXFOLIATIVA—INTERIOR VIEW.

The appearance of the skin also varied greatly in different parts of the body. In some places it looked as if it had been blistered. In fact, it was not an uncommon occurrence to hear the sufferer declare that he was being boiled alive. This was more especially so on the hands and feet. Some areas of the epidermis were more intensely inflamed than others. It was simply a question of degree. The higher the degree the more destructive was its effect upon the tissues. As might be expected, the underlying skin also presented a variable appearance. In some places it was comparatively smooth and healthy, the inflammation not having invaded it to any great extent. In others, it was rough and mottled and suffered partial destruction, while in others it was highly reddened, completely destroyed, and underwent a secondary exfoliation. In many places numerous bleeding puncta were seen beneath the desquamated surfaces. The itching or pruritis which attended the case was something terrible. This, which was an early symptom, grew progressively worse, reaching its height between the ninth and eleventh days. There was an irresistible desire to scratch, and though his hands were well bandaged, he succeeded in inflicting many bleeding injuries with his finger nails. Excessive thirst was another persistent symptom throughout the disease. This I attributed to the inflammation, involving the mucous membrane of the mouth and throat, and to a marked impairment of the action of the salivary glands.

The nails of the hands and feet lost their lustre, died, and in time were replaced by new ones. The hair fell in quantities; it finally grew again, but not in abundance. The skin remained in a dried dessicated condition for weeks. That of the hands and feet was the last to regain its healthy appearance.

Though the man is now in an apparently healthy condition, who can tell when he will again fall a victim to this distressing disease, or who can offer a prophylaxis, which will save him from its tortures?

Case II.—E. G., aged 3 years; female; family history good, child of strong, healthy parents; never had any severe illness prior to the invasion of this attack. First began to complain on August 25, 1899. Early symptoms were loss of appetite, nausea, headache, indisposition to play and general lassitude. The next day the child was brought to me at my office. She was pale, yet gave a temperature of 102°. She said "her head pained her" and that "she felt sick all over." Had been vomiting throughout the day. My first impression was that the child was suffering from acute indigestion. Put her on a carefully restricted diet, and directed the treament to her stomach and bowels. Did not hear anything from her until August 28th, when I was passing the house, and the parents asked me to stop to see her. At this time, I found the child extremely ill. Her temperature ran high, the pulse was very rapid, there was profound prostration, subsultus, delirium, rolling of head and every indication of the advent of some severe malady. The following day found no subsidence, but an aggravation of the alarming symptoms. The delirium and subsultus were now so pronounced as to lead me to believe the child was suffering from either typhoid or meningeal fever. Except a marked reduction in the pulse and a moderate fall in the temperature, the child remained in this condition for the next ten days. At this time, the father came to my office and said, "Doctor, my little girl is breaking out with some kind of an eruption, and I wish you would see her as quickly as you can." As soon as I could leave, I drove to his house and found the little sufferer one mass of eruption. It had made its appearance less than three hours before my visit, and now covered her entire body. Her eyes were red, face diffused and badly swollen and I was forced to change my opinion regarding the diagnosis of the case. What had so far been an extremely singular case, was rendered more so, and, as in the former case, I was at a loss what to call it. There had been no history of exposure to any of the exanthematous diseases, and yet the child presented every indication of a typical case of measles. This extensive eruption continued for two days and then gradually subsided. With its subsidence came a marked improvement of the constitutional symptoms, and the general condition of the child. My mind was beginning to be at ease, when another hasty summons informed me that my patient was again breaking out, and to all appearances, precisely as before. On reaching her bedside, I found the same to be true. The same rapid, extensive and violent dermatitis had again appeared, and the child was once more a sight to be seen. Unlike the former attack this one did not subside in a few days but persisted for weeks. Except in this and the other cases included in this paper, I have never seen any dermatitis approach it in severity. As might be expected, it wrought great destruction to the epidermis; which rolled up in great sheets, extending in some cases from the ensiform cartilage nearly to the pubes. Again, great sheets would roll up on the back as if the child had been scalded. In this way the entire epidermis desquamated, leaving a new skin in its place. But this did not escape the ravages of the disease. No sooner would the old epidermis loosen and exfoliate than the new skin would be attacked by the inflammation and destroyed.

This dreadful condition continued without abatement for nearly six weeks. During this time, the child became rapidly emaciated, the blood greatly impoverished, and the picture was a sad one to look upon. The lips, the mouth, the anterior and posterior nares were one mass of bleeding sores. Several severe attacks of epitaxsis complicated the case in its late stage, and were controlled only by the most heroic measures.

Profound anemia supervened, and ecchymosis of the eyelids was added as the little sufferer lingered. On October 7, 1899, or six weeks after the invasion of the disease, complete suppression of the urine arose.

Catheterisation of the bladder found it empty. The child gradually became comatose and died on October 9, 1899, of uremia, with interstitial nephritis. In this case, as in the former, many children were freely exposed, but none contracted it. There were children in both families and every possible exposure was offered, with negative results.

A COUNTRY HEALTH OFFICER AND BOARD OF HEALTH.[1]

By E. H. BALLOU, M. D., Gardenville, N. Y.

WHAT I have to say in this brief paper in regard to health matters pertains to the Town of West Seneca, where I have held the position of health officer for the past fifteen years. This town joins the City of Buffalo on the south and east for over five miles, therefore all things along the sanitary line affecting the southern suburbs of Buffalo also affect the town. Our first board of health was organised in the year 1885, consisting of the Town Board, ex-officio, and a citizen whom they elect annually to act with them. The general duties of the Town Board of Health are: first, to elect a health officer and recorder of vital statistics, to have charge of records of births, deaths and marriages, to pass such laws and rules with penalties attached as they may see fit when not in conflict with state laws, to see that the health officer puts all rules in force, and to pass judgment upon all cases where there is an appeal from any decision of the health officer in regard to health matters. They have an annual meeting in March for organisation and special meeting at the call of the president of the board or health officer.

The first duty that devolved upon me as health officer was to take charge of a case of smallpox. I received word that a child at Limestone Hill was ill with symptoms of smallpox, and upon investigation I found it to be as reported. It was a Polish child, and its parents to eke out their meagre living kept boarders. The father with seven of the boarders was working on the railroad with a gang of over 100 men, so that the germs of the disease had had a great chance to spread. Prompt measures were taken to quarantine this case. Through the kindness of Father Baker of the reformatory, a cottage was procured in the woods, at least one quarter of a mile from any habitation and the inmates of the house were moved thence, with the exception of the boarders, who had disappeared. The house was kept under guard, provisions were brought to them, and at the termination of the case all bedding, clothing and furniture of every description was burned. Every man, woman and child at Limestone Hill was vaccinated and there was no spread of the disease.

One of the greatest evils that our board of health had to contend with was the spreading of garbage and night soil from the city upon farms as fertilisers. This would not be objectionable were it done properly, that is, the fertiliser to be immediately ploughed under and allowed to mix with the soil; but this has not been the case and the result was one quite severe epidemic of typhoid fever. A large farm, about one mile from the city on Cazenovia Creek, was covered with night soil to the depth of two or three inches. This was exposed to rains and the heat of the sun for a number of weeks, the prevailing winds being southwesterly carried the sickening odor of night soil over a very thickly settled part of Seneca and adjoining streets. This odor was almost unbearable, so much so that the people were compelled to keep their doors and windows closed most of the time. Undoubtedly the germs of disease were also carried into this district, as within a short time typhoid fever appeared in nine different houses, and before a month had passed over thirty cases had been reported with many deaths. This to me was proof enough that garbage and night soil spread upon farms were unsanitary and not conducive to good health, and active and successful measures were taken to prevent the spread of illness and disease in this manner.

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[1] Presidential address delivered at the 80th annual meeting of the Medical Society of the County of Erie, January 8, 1901.

It has been our experience that quarantine and isolation have all to do with the spread of contagious disease. This has been exemplified time and time again; for instance, sporadic cases of scarlet fever have appeared in thickly settled portions of the town within fifty feet of a school house with no spread of the disease, whereas twenty years ago this dread disease entered our town from Lancaster and spread from school district to school district with over sixty deaths, this with out quarantine. Since that epidemic we have confined scarlet fever to only such cases as are contracted in some manner unknown, but generally upon a thorough investigation, we find that it comes from Buffalo. Whatever in regard to quarantine applies to scarlet fever applies also to diphtheria; that is, with the addition of the early use of antitoxin. There is not a doubt in my mind but that in time diphtheria can be entirely eradicated.

You all remember the epidemic of measles that spread through Buffalo last winter. Within a few days of its appearance in South Buffalo it followed out Seneca Street to school district number three, then to Ebenezer, from there to Reserve, and finally to Limestone Hill and Blasdell, closing all these schools from two to four weeks. Gardenville escaped, having had its experience about five years previous to that time.

The quarantine of measles I do not approve of for the following reasons: first, it is too late, for after a child is far enough advanced with measles to make a diagnosis of the case every one about it has been exposed for three or four days. Second, it keeps many well and healthy children out of school who expose no one to the disease excepting those who have been previously exposed. Third, this disease is very rarely fatal with children of school age.

With whooping cough my experience has been that all that is necessary is to isolate the case and not quarantine the entire family.

Immature or "bob veal," as it is commonly termed, caused us some trouble and expense. West Seneca was used as a dumping ground for all the bob veal in the south towns. It was brought in by the car load to the different depots and carted to Buffalo in the night by unscrupulous butchers, who disposed of it through the eastern part of the city, the Broadway market being made the distributing depot for most of it. The State Board of Health called our attention to the matter repeatedly, and we did what we could to prevent it, but it was a great expense, as we were obliged to station inspectors at all the depots for considerable length of time during the spring and fall. We therefore decided, if it were practicable, to shift this on to the city, as it did not interest us particularly, none of this veal having been offered for sale in our town. After consultation with Health Commissioner Wende, of Buffalo, I introduced the following resolution at a regular meeting of our board of health:

> *Resolved*, That the Buffalo inspector of meats and provisions be and hereby is appointed inspector of meats and provisions for the Town of West Seneca, he to serve without pay or recompense of any kind, and for any claims for damages for the destruction of meats or provisions by him the Town of West Seneca will not hold itself responsible.

This resolution was passed upon and accepted by the attorney for the City of Buffalo, and at our next meeting it was unanimously adopted, thereby relieving us of a great deal of trouble and considerable expense and placing it upon the City of Buffalo, where it properly belonged. This seems to have been very acceptable to the city, also to the state board of health, for since that time the state board of health has given the board of health of Buffalo jurisdiction over a large territory adjoining it, as regards the seizure and destruction of bob veal.

At present we have no particular system of sewerage, the three large creeks passing through our town acting as trunk sewers. The Sulphur Springs Orphan Asylum discharges its sewage into the Buffalo Creek, as does the Sisters of St. Francis Home at Gardenville, but the reformatory at Limestone Hill, with nearly 1,000 inmates, has its principal sewerage system connected with a city trunk sewer. All of these institutions have their water from Buffalo. We have no use for an elaborate system of sewerage, but as the demand for such arises, there is no doubt but what our sewage will be taken care of by the city system, as will also that of the Steel Plant.

All of our water comes from either wells or cisterns, and is not of the best, as the most of it is tainted with iron, sulphur or oil. In the vicinity of Gardenville, wells cannot be over twenty feet deep, as below this the water is too salty for use. In the near future we expect to have as good, if not better, water than even the City of Buffalo, as the Depew and Lancaster Water Company, whose pipes traverse our town from end to end, has contracted to place their water wherever it is desired. This water is taken from Lake Erie, about two miles from the shore line at Stony Point, and this is so far above Buffalo that it will be impossible to be contaminated by city sewage, and as plenty of pure water is conducive to cleanliness and good health we expect it will be a great factor in the development of the town.

Hoping that these few rambling and disconnected remarks will give you some insight into the duties of a country health officer, I close by inviting you all to move out into the Town of West Seneca, where you are sure to be vaccinated when you have been exposed to the smallpox, quarantined when you have scarlet fever or diphtheria, *not* quarantined when you have the measles or whooping cough (if I can help it), watered and washed with pure water from Lake Erie and when you die, buried not on top of the ground as in Howard Cemetery in days gone by, but in a decent and orderly manner.

NOTE ON FITTING TRUSSES.[1]

By M. A. VEEDER, M. D., Lyons, N. Y.

THE retention and much more the curability of hernias by the aid of trusses depend upon certain principles that require to be thoroughly understood and faithfully applied, in order to insure the best results.

The hernial canal, particularly when recently developed and not as yet much stretched, is, as a rule, oblique to the surface which it underlies, its outlet having the form of a more or less elongated slit, one lip of which commonly overlaps the other. This occurs in hernias of every type and is a fact of prime importance in their treatment by trusses.

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[1] Read at the thirty-third annual meeting of the Medical Association of Central New York, held at Rochester, N.Y., October 16, 1900.

No matter what style of truss is employed, its pad requires to press on the hernial canal in such manner as to cause the overlapping lip at its outlet to be put on the stretch in the direction of the axis of the canal and outward from its lumen. When this is done the slit will be flattened and closed firmly and smoothly and the entire canal will likewise be in the same condition as far as it is possible to bring about such a result by the aid of a truss. If, on the other hand, the pressure of the pad tends to force the tissues in any other direction than that just described toward the outlet of the canal, the margins of the slit will be found puckered and wrinkled and stretched apart, preventing adhesion. Thus, in an ordinary direct hernia the writer has seen a truss so adjusted as to shove the overlapping margin at the orifice of its canal entirely off from that underlying it. The hernia was retained it is true, but in an uncomfortable and at times painful way, and without the slightest tendency toward cure. In fact the margins of the canal were plainly puckered and kept apart instead of being smoothed, the one upon the other and brought into accurate coaptation. A very little such pulling and pushing in the wrong direction prevents the formation of adhesions, facilitating retention and in favorable cases bringing about absolute cure.

Thus, a particular type of truss may have a fine effect in one case and fail utterly in another, the direction of pressure required in the two cases being entirely different even in hernias of the same class. Thus, an ordinary direct hernia may open obliquely through the muscles and fascia outward or inward in reference to the median line of the body, and the pressure of the pad of the truss should be directed either toward or away from that line, according to the special requirements of the case.

Proper management of the pressure on the skin and the subcutaneous fat and other tissues that are movable, upon the firmer underlying muscles and fascia in which the hernial canal properly so-called is situated, is likewise requisite. The skin and the loose tissues underlying it can readily be put upon the stretch by pulling them in any direction desired while under the pressure of the pad of the truss, which holds them quite firmly in whatever direction they may have been thus stretched. In this way it becomes possible to cause the superficial tissues in question to assist in the closure of the hernial canal by exerting a constant pull upon the overlapping margin of its outlet, to which they are more or less firmly attached. This disposal of these tissues under the pad is much more comfortable also than allowing them to be pressed upon and shoved in any other direction. The amount of traction thus brought to bear should be just enough to insure perfect coaptation, any excess beyond this being useless and perhaps disagreeable.

Simple as these points may seem they are of very serious importance. In almost any case if a truss is carefully adjusted in accordance with the principles that have been indicated, and if this is always done before assuming the upright position, so as never to allow the hernia to protrude for an instant, ease of retention will be greatly increased in all cases, and the percentage of cures become very much larger. The length of time required varies according to the nature of each case, but improvement will continue for two or three years, even if a cure has not resulted in that interval of time.

From the point of view indicated it is necessary to study carefully the direction of pressure exerted by trusses of different types, so as to be able to select just what is needed for each particular case. It is needful also to have the patient return repeatedly, so that it may be seen whether every detail is properly understood. Patients who have little mechanical skill, or who are careless need to be drilled. Sometimes also it becomes necessary to adjust pads to make the counter pressure less uncomfortable and to modify the action of the truss slightly. Such pads for counter pressure may be made and adjusted by any harness maker and a little ingenuity in their application is often of great service. In any event there can be no very decided success in the use of trusses if the points here stated are ignored.

ALCOHOLISM,—A CRIME OR A DISEASE.[1]

By F. E. FRONCZAK, A. M., M. D., Buffalo, N. Y.

FOR some time past, voices have been raised and heard in various parts of this country, and also in Europe, on the important and ever interest-attracting question of alcoholism. Is an alcoholic a criminal, or a sick man? Is a chronic drunkard always hovering on the border of delirium tremens, subject to the penal code of our commonwealths, or is he a candidate for a cot in a hospital ward? Is a man, who under the influence of liquor commits any criminal act liable to punishment, or should he, as the person suffering from mental aberration, whether temporary or of longer standing, be committed to an asylum for inebriates for treatment? These are questions which stagger many a medico-legal specialist.

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[1] Read at the thirty-third annual meeting of the Medical Association of Central New York, held at Rochester, N. Y., October 16, 1900.

The ninth congress of Polish physicians and scientists, at its last meeting in July, at Cracow, declared the question to be one deserving the highest consideration, and at its next congress at Lemberg in 1903, will devote most of its time to the proper steps tending to the solution of this matter.

Alcoholism, and its victims, the drunkards, cost every community large sums annually. Laws of all kinds have been passed bearing on the liquor traffic and all kinds of means have been taken for its suppression and limitation of its consequences. Families have been ruined, and crimes, aye murders, have been committed in drunken frenzy. If smallpox and cholera are quarantined, if we try to discover the causes which produce tuberculosis or typhoid fever, why should we not try to prevent causes which perpetuate alcoholism. If any of the above mentioned diseases attack a person, the patient undergoes treatment, why should not an alcoholic also be treated?

This is the age of prophylaxis. The highest and most eminent branch of the medical science is the teaching of hygiene, or preservation of health and prevention of disease. The preventive measures for the fracture of a limb, I suppose the surgeon would name: "Do not fracture it." The preventive measures for alcoholism, I answer, "Do not expose yourself to alcoholic influences." And this we must leave to the solons of the legislatures of our different states and the nation, who are supposed to pass such laws as will bring about this condition. But when one does expose himself to the morbid conditions following alcoholic indulgence, whether this condition is chronic or temporary, I believe the members of our profession owe it a duty to themselves and to mankind to step in and use their power to bring the patient to his former condition, as much as this is possible.

Alcoholism is classed among the nervous and mental diseases, and the pathology, as studied by various eminent authors' shows most marked changes in the nervous system; various nerve cells are changed and disintegrated, capillaries are dilated in the entire central nervous apparatus, in one word, there is an abnormal condition in that system after each and every alcoholic debauchery. These are the physical conditions we are to rectify, and not simply the moral one which the penal code provides for the treatment of this so-called crime.

Gentlemen, in my annual report for 1900, as physician of the Erie County Penitentiary, I said:

Drunkenness is not a crime, it is a disease, and should be treated as such. This is an opinion of men of eminence in law and medicine, and therefore let us begin to treat it as such, in this the closing year of the nineteenth century of our era. Insanity was considered a crime but a short time ago, but now the civilised world considers it a morbid condition of the mind, and provides proper hospitals for its cure. Let us, therefore, give the alcoholics, like the insane, proper surroundings and proper treatment and cure. We do not liberate the insane before he is considered cured by proper authorities; let us therefore, on the same basis, put alcoholics where they properly belong. I recommend this to your kind consideration.

What I said in that report, Mr. Chairman, I repeat. Give the alcoholics, meaning the chronic drunkards, the men who compose the majority of the prisoners on the blotters at the police stations, and who occupy the greater majority of the cells in the penal institutions, proper hospitals, proper surroundings, and proper treatment and care, and a large percentage of chronic alcoholism will disappear. Alcoholism, like smallpox through vaccination, or typhoid fever through hygienic prophylactic measures, will slowly cease to be an endemic disease in certain localities, and many a medico-legal case will thereby be eliminated from the dockets of our criminal courts.

508 FILLMORE AVENUE.

FORMALDEHYDE GAS.[1]

ITS MOST SIMPLE APPLICATION AND ITS LIMITATIONS IN HOUSEHOLD DISINFECTION.

BY WILLIAM G. BISSELL, M. D.,
Bacteriologist Department ot Health, Buffalo, N. Y.

AN APOLOGY might seem necessary in offering for discussion a subject which has received such wide attention by sanitary experts, and particularly when I am unable to present anything new regarding the chemistry of formaldehyde as a disinfectant.

The excuse for presenting this subject is the experience gained in the actual application of the various methods for the use of formaldehyde gas in household disinfection, and an attempt to correct many misleading expressions which have been published from time to time in the medical literature and which have influenced the physicians of Buffalo, and probably those of many other cities, also, expect too great results from the application of gaseous substances in the disinfection of the household after the existence of a contagious malady.

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[1] Read before the section on pathology, Buffalo Academy of Medicine, January 15, 1901.

The thorough disinfection of rooms and their contents constitutes one of the chief means for the prevention of the spread of disease. Up to the time of the introduction of formaldehyde gas, sulphur fumigation was most extensively employed. From time to time, medical literature has contained articles which have been the means of casting doubts upon the efficiency of sulphur dioxide as a germicide, this being due perhaps to excessive expectations of its germicidal value and especially by its improper employment.

The etiological factors in the production of such diseases as measles, smallpox and scarlet fever are unknown. Sulphur dioxide will not kill the spores of anthrax, nor will it so affect certain other resistant germs as to prevent their growth in culture. This fact does not disprove that sulphur dioxide accomplishes much in rendering noninfective apartments where measles, and the like, have existed. Practical observations demonstrate this point.

When the sulphur method is properly employed, there is no doubt of its efficiency in restricting the spread of many infectious maladies. It is contended by one[1] who is in a position to know that in the practical disinfection of the household it is not always necessary to completely kill the organisms (although this result, if it can be attained, is the best,) but to so decrease their disease-producing powers that they are incapable of producing immediate infection and "factor time," in the majority of instances, will cause complete destruction. The efficiency of sulphur dioxide as a germicidal agent can briefly be summarised as follows: it possesses little or no action, on most bacteria, when in the dry state. When specimens are actually wet, they will be destroyed, except in certain cases of resistant forms, as the bacillus tuberculosis, and certain other organisms when in their resting or sporulating stage. This means that sulphur is of little value in disinfecting the apartments of consumptives, or those in which the patient suffered from a disease, the organisms producing which was known to be capable of spore formation.

To produce germicidal results the walls, floor and articles in the room should be sprayed with water, and from three to six pounds of sulphur burned to each thousand cubic feet of air space. By this procedure many articles are destroyed for future use, yet it is the only positive means of accomplishing disinfection with sulphur.

Since the introduction of formaldehyde gas, many methods have been proposed for its application and most of them include the use of complicated and expensive instruments. In the use of sulphur, the universal household method of generating the gas is by the burning of candles devised for this purpose. Until very recently, the methods suggested for applying formaldehyde have been as follows:

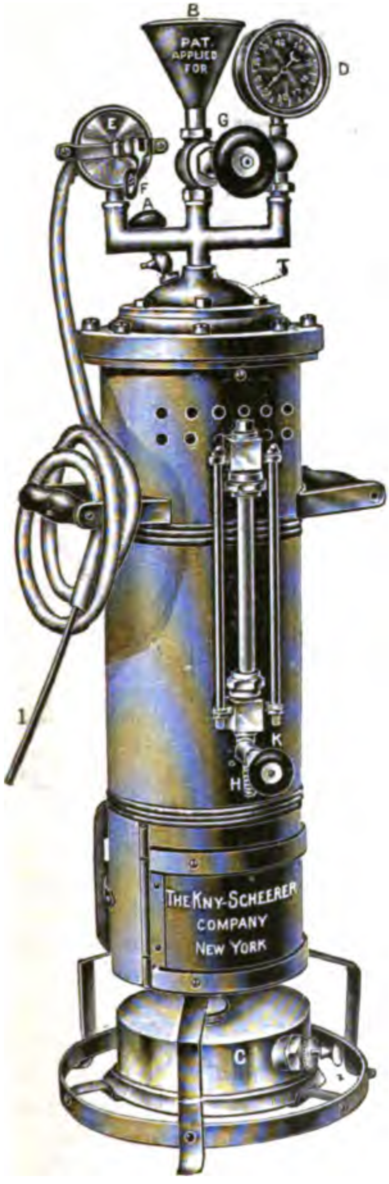
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Fig. 1.—Formaldehyde Autoclave.

1. The use of an apparatus known as an autoclave, the gas being generated under pressure from solutions of formaldehyde incorporated with various proportions of calcium chloride. (Fig. 1.)
2. By the use of the formaldehyde gas regenerator in which formaldehyde passes from a tank into a shallow chamber, is decomposed by heat, into paraformaldehyde, the heat being sufficient to cause regeneration of the gas. (Fig. 2.)
3. By the oxidation of wood alcohol, using lamps especially constructed for the purpose. (Fig. 3.)
4. By heating a substance known as paraformaldehyde, or paraform, in an apparatus originally designed by Schering. (Figs. 4 and 5.)
5. By the vaporisation of formaldehyde containing a small percentage of borax or mixtures of formaldehyde and glycerine, in an apparatus as designed by Novy. (Fig. 6.)
6. By the use of sheets, suspended in the apartments, on which varying amounts of formaldehyde has been sprayed.
7. The use of an atomiser having a forced bulb attachment, solutions of formaldehyde being employed.

Whereas many of these methods are efficient in their germicidal effects, none of them, in the judgment of the writer, meet the requirements of simplicity in a sufficient degree to render them practical for household use and still possess the necessary dependence to insure absolute safety in the use of articles after the existence of a contagious or infectious malady.

The following series of experiments, "A" and "B," tend to demonstrate two important factors regarding the use of formaldehyde: (1) The slight penetrating properties of the gas with certain substances; (2) the unreliability of the most common method which has been employed in many series of tests to determine whether the gas has the power of surface disinfection.

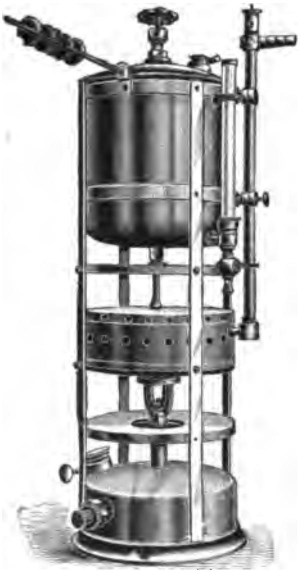

Fig. 2.—Sanitary Construction Co.'s Formaldehyde Regenerator.

TEST-SERIES "A."

A fluid culture of the bacillus prodigiosus was mixed with pulverised sugar and allowed to dry. The mixture was again pulverised and dusted on the surface of the materials mentioned in such a manner that gentle shaking would easily cause its removal without actually touching the surfaces.

After being exposed for twelve hours in a room containing 2,100 cubic feet, formaldehyde having been introduced by the autoclave method, the results were as follows:

(*a*) Dusted on plaster having smooth finish, prodigiosus destroyed.

(*b*) Dusted on plaster having rough finish, prodigiosus destroyed.

(*c*) Dusted on ordinary wall-paper, prodigiosus destroyed.

(*d*) Dusted on painted wood surface, prodigiosus destroyed.

This series of tests would appear to establish, without question of doubt, the efficiency of the gas as a mere surface disinfectant. The known infected materials occupied the same position as do the walls of a dust-laden apartment.

All "control cultures" grew.

TEST SERIES "B."

The surfaces of the plaster having the smooth finish, plaster having rough finish, wall-paper and painted wood which were used in the tests of series "A" were slightly touched with sterilised platinum wires and sterilised cotton swabs, and inoculations made into nutrient gelatine, nutrient agar and bouillon, resulting in bacterial growths in all media, with the exception of those inoculated from the paint. The growths present were not the bacillus prodigiosus. This test appears to demonstrate the extremely slight penetrating properties of formaldehyde with the materials mentioned. Also the unreliability of this test method, due to the difficulty of removing portions of the surface dust without, at the same time, removing a portion of the plaster or other material under observation. All test objects were kept under glass covers on completion of the exposures to formaldehyde, thereby preventing possible contamination from outside sources.

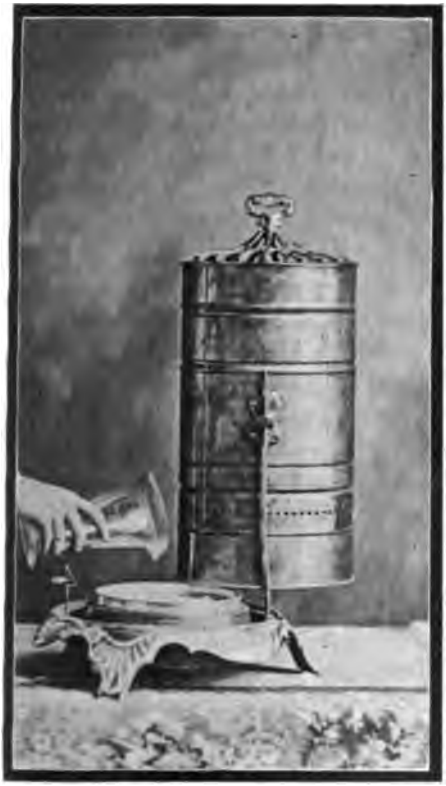

Fig. 3.—Kuhn Formaldehyde Lamp.

Some reports published in regard to the value of certain instruments betray such a bias in favor of a particular apparatus, as to suggest that their authors, in their ambition to write up this method, lost sight of the fact that it is the practical germicidal effect which is desired, and any procedure that embraces, first of all, simplicity, and yet retains its effectiveness, is the one that will prove most useful in household application.

The autoclave method is efficient in its results, but is not simple of application. It is necessary to have a large machine of expensive construction that cannot be satisfactorily employed by an inexperienced person. This apparatus consists of a heavy silver-lined copper cylinder into which a mixture containing formaldehyde with some neutral salt—usually calcium chloride—is placed. The funnel-like valve, (Fig. 1—B) by means of which the mixture (composed of formaldehyde, 40 per cent., 1,000 parts; calcium chloride, 200 parts; water, 400 parts) has been introduced, is closed and a Swedish lamp (Fig. 1—C) applied to the bottom. By an automatic device (Fig. 1—E) when sufficient pressure is generated—usually that of three atmospheres —(temperature, 135° C) the gas is liberated through a small rubber tube, which can be conveniently introduced through a key-hole or some other small aperture, into the room to be disinfected. About seventy minutes is required to volatilise one liter of the fluid.

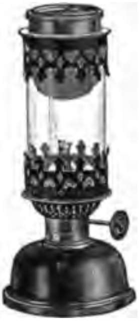
Fig. 4—Schering's Disinfectant Lamp.

The formaldehyde regenerator has the disadvantage of becoming readily disordered, and considerable annoyance is experienced by the plugging of the discharge tube with solid paraformaldehyde. This method likewise requires a special apparatus which, in the writer's experience could not at all times be depended upon for use. The machine is difficult for an inexperienced person to operate, but, when satisfactorily employed, is efficient in its results.

The oxidation of wood alcohol by lamps designed for this purpose has not proven successful in household application, for the reason that insufficient amounts of gas are generated to supply the necessary concentration.

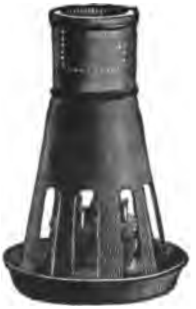
Fig. 5—Schering's Disinfector.

A lamp known as the Kuhn formaldehyde generator, according to an opinion expressed by Dr. Geddings,[2] of the U. S. Marine Hospital Service, is more effective in its results than any other methyl alcohol lamp. This factor, if so, is probably due to the size and construction of the instrument which allows of more rapid oxidation of a much larger quantity of wood alcohol. The alcohol is placed in a receptacle at the bottom, and when lighted, its vapor passes between two cones of platinised asbestos, one of which is so arranged as to act as a deflector, thus preventing extreme heat being thrown directly upon the surface of the vessel containing the wood alcohol. Any of the alcoholic vapor which escapes the platinised cones passes through five disks or layers of platinised wire. In this way, it is thought, the alcohol is brought into more certain contact with platinised surfaces, which is absolutely necessary in the conversion of the alcohol into formaldehyde gas. Lack of personal experience with this device does not permit of the confirmation of the results said to have been attained in its use in the Marine Hospital Service. If the generator accomplishes what is claimed for it, it is the only methyl alcohol lamp on the market which is at all serviceable in household disinfection. Allowing that this method is efficient, it, like the others, requires an expensive apparatus for carrying on the operation.

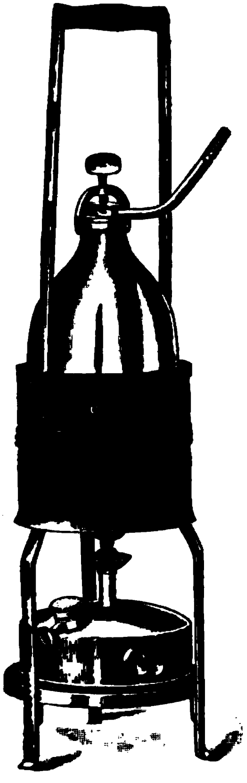

Fig. 6.—This Machine can be used as an Autoclave and also for Vaporisation of Mixtures.

The method suggested by Schering is efficient in results, but personal experience demonstrates that a much greater number of pastiles must be volatilised than is suggested by the dealers. The method, likewise, requires a special apparatus for carrying on the operation, but the device is inexpensive compared with the former appliances mentioned. The mode of using the apparatus is simple.

The disinfector (Fig. 5) or the disinfecting lamp (Fig. 4) is placed upon a sheet of iron on the floor of the room to be disinfected. In the disinfector about 200 pastiles can be evaporated at a time. For the production of greater quantities of formaldehyde vapor, several outfits must be employed. The pastiles are placed in the cup-like attachment in the top and heat is supplied by the use of an ordinary spirit lamp.

The disinfector is supplied with a small boiler-like arrangement which answers the purpose of furnishing moisture with the gas. Seventy-five pastiles are advertised as being sufficient for the surface disinfection of each 1,000 cubic feet of space. Personal experience has demonstrated that not less than 200 pastiles should be relied upon for this result. In apartments containing more than 5,000 cubic feet, a hospital ward, and the like, it has not been possible for the writer to insure surface disinfection by the use of 200 pastiles to every 1,000 cubic feet of air space.

The vaporisation of mixtures of formaldehyde with either borax or glycerine has, in the use of the glycerine, the disagreeable feature of covering all articles in the room with a sticky substance which, in many instances, causes destruction of the materials. When used with borax, it is said not to possess this feature and to be equally efficient in its germicidal results. The method, likewise, requires the use of a special apparatus.

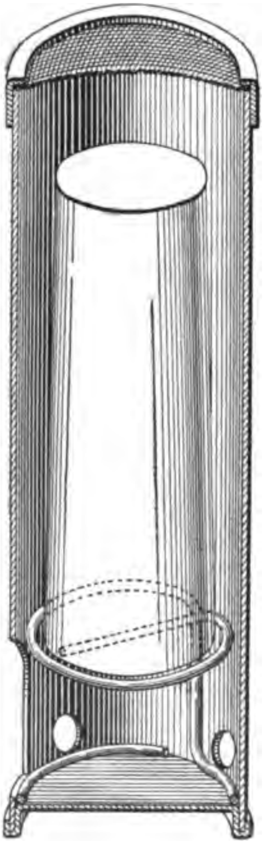

Fig. 7.

Personal experience with the use of sheets, sprayed with 40 per cent. solutions of formaldehyde, using 180 c.c. to 1,000 cubic feet of air space, has not given uniformly constant results. This method, however, has been adopted by the Chicago Board of Health, and reports from that department appear satisfactory.

The use of the spray, applying solutions of formaldehyde directly upon the articles to be disinfected, is a most difficult operation, on account of the extremely irritating properties of the gas, affecting, most noticeably, the eye and air-passages of the operator. This method has been adopted by the Pullman Palace Car Company in the disinfection of its cars.

It is possible for sulphur fumigation to be efficiently carried out by the most inexperienced operator and sulphurous acid gas is unquestionably a valuable bactericide, but the ordinary household application, as it is practised in Buffalo, is of restricted value, in that the articles, in most instances, are not previously sprayed with moisture. Sulphur dioxide has accomplished much in the past, and undoubtedly will continue to do so in the future, but experience has demonstrated formaldehyde to be a far less destructive and an equally potent and reliable germicide.

There has recently been placed upon the market a candle (Fig. 7) consisting of paraformaldehyde which can be applied in the same manner as are those composed of sulphur. This candle consists of paraformaldehyde incorporated with a small proportion of paraffine and pressed in cylindrical form, the cylinders being of two different sizes. To utilise the candle, it is supplied in a tin container or burner to which a limited amount of oxygen has access during operation so as to support combustion only at the bottom of the candle, and by burning in this manner the heat produced causes the solid paraformaldehyde to revert to the gaseous formaldehyde.

Paraform burns freely and the flame would extend over the entire surface if some container limiting the supply of oxygen during combustion was not employed. If the entire surface of the candle was allowed to burn, the gas would be converted into carbon dioxide and water by the flame and rendered inert for disinfecting purposes. The smaller size candle contains, approximately, 350 grains of paraformaldehyde, and according to tests (series C. and D.) carried on in the Bureau of Bacteriology, Department of Health, Buffalo, N.Y., this candle when properly ignited, generates sufficient gas for the surface disinfection of a room not exceeding 300 cubic feet capacity, and by increasing the number of candles in the proportion of one to every additional 300 cubic feet of air space, this method can be relied upon for the surface disinfection after certain diseases (the limitations of which are explained later) in rooms not exceeding 3,000 cubic feet capacity. With this, as with all other methods, if the room capacity greatly exceeded this amount, even though an additional number of candles in the same ratio were applied, it was impossible to obtain by sufficient rapid diffusion the necessary concentration of the gas to insure constant results. This may, in a measure, explain the reason for failures in the use of formaldehyde gas to act as a surface disinfectant in many instances reported.

As regards the tests conducted at the Army Barracks, Fort Meyer, Va.,[3] those made by the writer in series "B" account for the results obtained. In this instance, the tests conducted were by touching the walls with platinum wires and subsequent culture of material obtained. The apartment in which many of the experiments were conducted at the Department of Health, Buffalo, was such as would represent a living room of a capacity of about 2,100 cubic feet of air space and contained three large windows with moderately tight casings, and no additional precautions were taken to prevent the escape of the gas. In using the larger candle which contains, approximately, 700 grains of paraform, one candle was found to be sufficient for 500 cubic feet of air space and efficient up to a capacity not exceeding 3,000 cubic feet.

To insure the best results, in the use of this method of room disinfection, the following precautions should be exercised: (1) The room made as nearly air-tight as possible; (2) The use of one small candle to each 300 cubic feet of air space, and not depending upon this means of disinfection in apartments containing more than 3,000 cubic feet; (3) that the surfaces of the articles to be disinfected be so arranged as to allow free exposure to the gas; (4) that the room remain closed from six to twelve hours; (5) that a cleansing process supplement the procedure.

Certain facts are to be particularly remembered in the application of this gas in household disinfection. While diffusing with great readiness, it possesses but slight penetrating properties. This is easily shown by the facility with which certain bacteria were destroyed in test series C and D when distributed through porous fabrics, and yet retain their ability to grow in cultures when spread upon surfaces like glass, metal and glazed cardboard.

These facts demonstrate that to thoroughly disinfect a room and its contents, we should not depend solely upon formaldehyde, but that, in rooms having glazed surfaces, china, marble, metal, and the like, subsequent washing with solutions possessing recognised germicidal properties, like 5 per cent. solution of formalin, 5 per cent. carbolic acid, etc., should be employed. Thus, it is shown that while in formaldehyde gas we now have an efficient and harmless disinfectant for such objects as laces, plush, velvet, curtains, table-covers, hangings, and the like, for which heretofore no satisfactory household method of disinfection had been devised, and while in many cases its action upon all objects may be efficient and satisfactory, and its action upon metals, picture frames, and so forth, harmless and non-corrosive, in cases of serious infection, where it is possible that infectious matter, such as blood, saliva, sputum, feces, pus or urine may be dried upon wood floors, chamber vessels, basins, washstands, glasses, metal bedsteads and other hard surfaces, its action should be supplemented by a cleansing and disinfecting solution possessing solvent and penetrating powers.

TEST SERIES "C."

Cultures of organisms named dried on material given and exposed six hours:

	Cholera Culture.	Typhoid Culture.	Diphtheria Culture.	Diphtheria Membr'e.	B. Icteroids Culture.	B. Pestis Culture.	Tubercular Sputum.
Metal plates	o	+	+	+	?	o	+
Glass	o	+	+	+	?	o	+
Filter paper	o	o	o		o	o	o
Glazed cardboard	o	+	o		o	o	+
Cheese cloth	o	o	o		o	o	o
Cotton batting	o	o	o		o	o	+
Flannel	o	o	o		o	o	o
Cotton Cloth	o	o	o		o	o	o

TEST SERIES "D."

Materials impregnated with fluid cultures, and moist during time of exposure:

	Cholera Culture.	Typhoid Culture.	Diphtheria Culture.	B. Icteroids Culture.	B. Pestis Culture.	Tubercular Sputum.
Metal Plates	o	o	+	o	o	+
Glass	o	o	+	o	o	+
Filter Paper	o	o	o	o	o	
Glazed cardboard	o	o	o	o	o	
Cheese cloth	o	o	o	o	o	
Cotton batting	o	o	o	o	o	
Flannel	o	o	o	o	o	
Wool Yarn	o	o	o	o	o	

In series "D" the infected test objects were placed in a Novy anaërobic jar. The formaldehyde candles were used in a cupboard in proportions of 1½ grains to each cubic foot of space. The gas in the cupboard was drawn through the jar and the jar closed.

By this procedure, the test objects remained moist the majority of the time during exposure, which demonstrates that moisture facilitates disinfection.

The application of formaldehyde to household disinfection can be briefly summarised as follows: (1) it is the most satisfactory of the gaseous disinfectants; (2) its penetrating powers are extremely slight; (3) a certain degree of moisture facilitates its action; (4) it should always be supplemented by a cleansing process.

The writer desires to express his appreciation to Dr. Eugene Wasdin, of the Marine Hospital Service, for furnishing the cultures of the bacillus icteroides and bacillus pestis, and to the various manufacturers for the cuts so generously loaned in publishing this article.

REFERENCES.

1. Personal conversation with Dr. Wasdin.
2. Public Health Reports—Marine Hospital Service (Vol. XV., No. 42.).
3. Personal conversation with Dr. Vertner Kennerson.

143 ELMWOOD AVENUE.

OSTEOPATHS in Milwaukee have been arrested on warrants sworn out by the assistant district attorney. They are charged with unlawful use of the title of "Doctor" and of practising medicine without a license from the State Board.—*Medical Age.*

Society Proceedings.

MEDICAL SOCIETY OF THE COUNTY OF ERIE.

EIGHTIETH ANNUAL MEETING, JANUARY 8, 1901.

Reported by FRANKLIN C. GRAM, M. D., Secretary.

THE president, Dr. E. H. Ballou, of Gardenville, called the meeting to order at 10 a.m., January 8, 1901, in the Y.M.C.A., Parlors, where a large number of the members had assembled.

After the minutes of the previous meeting had been adopted the president appointed a nominating committee, consisting of Drs. Wm. C. Krauss, Irving W. Potter and W. D. Bidaman.

Dr. J. J. Walsh, of the committee on membership, reported favorably on the following-named applicants, who were thereupon elected to membership in the society: Drs. Henry C. Lapp, of Clarence; Geo. N. Jack, of Depew; Wm. C. Jolls, of Orchard Park; Frederick H. Ehinger, of Ebenezer; Prescott LeBreton, Grosvenor R. Trowbridge and James J. Mooney, of Buffalo.

The president then called Dr. Coakley to the chair and delivered his annual address, entitled, A Country Health Officer and the Board of Health. (See page 488.)

Dr. J. B. Coakley, chairman of the board of censors, next submitted the annual report of the board as follows:

To the Medical Society of the County of Erie:

Since the last report made to the society in June, 1900, the censors have continued their work of investigating cases of alleged illegal practitioners of medicine and surgery. There have been a number of such cases in which persons violating the law have done so under a mistake, and, having discontinued so doing, your board has deemed it unnecessary to institute any prosecutions.

In the case of William Carpenter, who is already under indictment for illegally practising medicine, a second indictment on what seemed to your board and the grand jury and district attorney amply sufficient evidence to warrant a conviction was found. The case was tried ably and well on the part of the prosecution, Carpenter having practically no defense, and the only appeal which was made in his behalf by his counsel was a claim that if he was convicted and fined, the fine instead of going to the county treasurer would be paid over to this society for its own private purposes. Of course, the court charged the jury that this was no concern of theirs, but the jury promptly rendered a verdict of not guilty. Some of the jurors have since informed your counsel that it was their unanimous opinion that they would not give a verdict in any case of this kind convicting the accused, while the law stood as it does at present. We have, therefore, come to the conclusion that it would be well for the law to be amended, either by striking out this provision for the payment of the fine to the medical society entirely, or by modifying it so that one-half or one fourth only should be paid to this society.

Our counsel is in correspondence with the Hon. Robert W. Taylor, of New York, counsel for the Medical Society of the County of New York, in regard to several amendments to the medical law, which would have been adopted last winter but for the fact that the statutory revision commission was abolished. We respectfully urge that he be authorised to arrange, if possible, for the coöperation of the New York Medical Society in amending the law in reference to the payment of the fine as above indicated.

In the case of Arthur de Collard, who advertised in the Buffalo *Express* as "Dr. de Collard," and under the guise of massage treatment, was diagnosticating cases and giving some ointments and, in one instance, iron tablets, your board obtained affidavits and obtained a warrant of arrest for Collard from the police justice. On the trial Collard proved by a man named Brooks, part of whose house he occupies, that he Brooks, wrote the advertisement and put in the title of "Dr." without Collard's consent, and that the said advertisement had been discontinued as soon as he was arrested. He claimed also that his treatment was nothing but ordinary massage treatment. The police justice declined to hold him for the grand jury. There is but little doubt that he imposes upon the credulity of the public and his patients more or less, and your board has under consideration the advisability of presenting his case to the grand jury at its next session.

While it may appear that the prosecutions which your board of censors have instituted have not resulted in convictions, it is undoubtedly true that the publicity given to these prosecutions, and the fact that it is known that your board makes rigid investigations and attempts to bring to punishment offenders against the medical law, has a salutary effect in preventing violations of this law.

In conclusion, this board respectfully recommends that the Hon. Tracy C. Becker be continued as counsel on the same terms as heretofore. We also recommend that this board be given authority to employ such detectives and other agents as may be required for the performance of its duties, and to draw upon the treasurer as heretofore for their reasonable compensation.

Respectfully submitted,

J. B. COAKLEY, *Chairman.*
HENRY R. HOPKINS.
THOMAS F. DWYER.
FRANCIS E. FRONCZAK.
IRVING W. POTTER.

The report was adopted and the thanks of the society extended to the board.

Dr. **Wm. C. Krauss**, of the committee on nominations, submitted the following report: For president, Dr. Wm. C. Phelps, Buffalo; for vice-president, Dr. Walden M. Ward, North Collins; for secretary, Dr. Franklin C. Gram; for treasurer, Dr. Edward Clark; for librarian, Dr. Wm. C. Callanan; for board of censors, Dr. J. B. Coakley, chairman; and Drs. Henry R. Hopkins, Irving W. Potter, F. E. Fronczak, and Henry Lapp, of Clarence.

For delegates to the Medical Society of the State of New York: Drs. Justin G. Thompson, of Angola; John D. McPherson, of Akron; Walter D. Greene, Henry D. Ingraham, Irving M. Snow, Wm. G. Bissell, A. L. Benedict and N. W. Wilson, of Buffalo.

For Alternates: Drs. E. H. Ballou, Gardenville; R. S. Meyers, Clarence Center; C. E. Congdon, Dewitt H. Sherman, Chauncy P. Smith, Sidney A. Dunham, Grosvenor R. Trowbridge and Geo. F. Cott, of Buffalo.

In presenting the list of alternates, Dr. Krauss stated that the number of members who were desirous of becoming delegates was far in excess of the vacancies, as only one delegate could be sent for each assembly district; but it sometimes happens that a regular delegate is unable to attend, and in order not to lose representation this plan was proposed. He moved the adoption of the report and that the secretary be instructed to cast the vote of the society for the nominees.

This motion was adopted and the secretary cast the ballot as directed. The president then declared the officers, as reported by the committee, duly elected for the ensuing year.

Dr. **A. L. Benedict**, of the special committee, appointed at the semi-annual meeting, made the following report:

To the Medical Society of the County of Erie, State of New York:

Your committee, appointed to consider means for harmonising the regular profession of medicine in this state, and for securing recognition in the American Medical Association for members of the profession in affiliation with the Medical Society of the State of New York, would recommend the adoption of the following resolution:

Whereas, we, the members of the Medical Society of the County of Erie, deprecate all schism in the medical profession and, particularly, the double system of state and county organisation, at present separating regular physicians who are practically in harmony, both as regards methods of practice and principles of ethics;

Whereas, we believe the first step in securing a reunion of the medical profession of the State of New York consists in obtaining for the Medical Society of the State of New York and its dependent county societies, representation and membership in the American Medical Association;

Be it *Resolved*, That we petition the Medical Society of the State of New York to apply for representation in the American Medical Association;

Be it further *Resolved*, That a copy of the resolutions be transmitted to the secretary of the Medical Society of the State of New York and of each County Medical Society of New York State.

A. L. BENEDICT, *Chairman.*
J. B. COAKLEY
ELI H. LONG.

Buffalo, January 8, 1901.

Dr. HENRY R. HOPKINS, of the committee, presented the following minority report:

WHEREAS, it is the deliberate judgment of the Medical Society of the County of Erie, that the medical profession of the State of New York will be more efficiently and intelligently organised for the promotion of the knowledge of the healing art, and the preservation of the public health, when there shall be one medical society, and in each county, one county medical society—which several societies shall include in this membership all persons authorised by law to practise physic and surgery in the State of New York; therefore

Resolved, That all by-laws, codes, regulations and usages contrary or repugnant to the foregoing principles, be and the same hereby are declared to be antagonistic to the best interests of the medical profession and inimical to the public health.

Resolved, That the Medical Society of the County of Erie through its president and secretary invite all persons duly licensed by law to practise physic and surgery and residing in the County of Erie, State of New York, to join the Medical Society of the County of Erie.

Resolved, That these resolutions duly attested be transmitted to the Medical Society of the State of New York, and to the several county medical societies of the State.

HENRY R. HOPKINS.

Buffalo, January 8, 1901.

Dr. HOPKINS did not consider it advisable to dispose of either report at the present meeting. Both contained suggestions which required careful consideration and this could be better done by giving the members an opportunity to read the reports with the regular proceedings. He moved that both reports lie on the table until the June meeting.

Dr. BENEDICT advocated an immediate disposition, but Dr. Hopkins's motion prevailed, whereupon both reports were received and filed.

The treasurer, Dr. **Edward Clark**, submitted his annual report. The receipts were $460.76, and the expenditures, $415.18, leaving a balance of $45.58. The separate accounts and vouchers were submitted to Drs. Fronczak and Lapp for audit, who later reported finding them correct.

Dr. **Lucien Howe** presented the following:

Resolved, That a committee of three be appointed whose duty it shall be to select not more than 100 delegates from the Medical Society of the County of Erie, to the Medical Association of Central New York, and the members thus selected by that committee shall be considered as delegates from this society to that association.

The resolution was adopted and the chair appointed as such committee Drs. A. A. Jones, Lucien Howe and Wm. C. Krauss.

Dr. **Charles E. Congdon** called attention to the difficulty experienced by physicians in collecting accounts. The physician usually comes last in the consideration of just debts. Laborers and mechanics are given preference under the law, having the privilege of enforcing payment of judgments under body executions by which a delinquent may be imprisoned until a debt is paid, but professional men, whose services are required in the saving of human life, have no protection, except by the usual methods of enforcing claims. He cited instances to support his assertions and believed that in these days when all classes organise for mutual protection the physician should be in line and awake to his own interests.

He advocated the formation of a union for this purpose, and as such an innovation requires considerable time and study as to the best methods of procedure, he moved that a committee of three be appointed to draft plans and present them to the society at its next regular meeting.

This resolution was adopted and the chair named Drs. Congdon, W. G. Bissell and D. J. Constantine as such committee.

Dr. J. H. **Pryor** gave a brief review of legislation in reference to tuberculosis in this state. He pointed out the main features of what had been accomplished and what remained to be done.

At the conclusion of his remarks Dr. H. R. **Hopkins** offered the following resolution, which was adopted:

Resolved, That the Medical Society of the County of Erie hereby affirms its earnest belief in the truth of the infectiousness, the preventability, the curability of consumption, and therefore commends to the medical societies of the several counties of the State of New York, and to the Medical Society of the State of New York, the proposition for a state sanatorium for the cure of incipient consumptives and of municipal hospitals for the treatment of advanced cases of consumption, as in every way humane, wise, and expedient, this being the cause of state prevention of consumption.

Resolved, That a copy of these resolutions duly attested be transmitted to our representatives at Albany and to the several medical societies herein mentioned, and that we urge them to use all honorable means with diligence for the promotion of this cause.

Dr. GEO. N. JACK, of Depew, N.Y., read a paper entitled, A Brief Résumé of the Grosser Animal Nature, and its Application in Medicine. Dr. W. C. Callanan's paper on Gastro-intestinal Diseases in Children was read by title.

Dr. Ballou then introduced the newly elected president, Dr. Wm. C. Phelps, who was heartily applauded on assuming the chair. He briefly expressed his appreciation of the honor.

A vote of thanks was tendered the retiring president, Dr. Ballou.

The president appointed the following committees: On membership, Drs. W. W. Potter, chairman; G. W. McPherson and J. J. Walsh. On legislation, Drs. W. W. Potter, Ernest Wende and Edward Clark.

Adjournment followed.

BUFFALO ACADEMY OF MEDICINE.

Section on Medicine, December 10, 1900.

REPORTED BY JULIUS ULLMAN, M. D., Secretary.

THE third regular meeting for the season of the medical section of the Buffalo Academy of Medicine was held in the Public Library Building, Tuesday evening, December 10, 1900.

The chairman, Dr. ELI H. LONG called the section to order and the minutes of the previous meeting were read and approved.

It was moved by Dr. A. L. Benedict and seconded by Dr. Charles S. Jewett that in order to shorten the duration of meetings the formal minutes be limited to a brief record of the transactions of the session, but that this be not construed as an objection to the publication of the reports. Lost.

Dr. PRESCOTT LEBRETON presented a paper which in the unavoidable absence of the essayist, was read by Dr. Julius Ullman, entitled,

THE TREATMENT OF DISEASE LOCALLY BY HOT AIR.

The writer referred to Tallerman, of England, who in 1893, introduced the use of superheated dry air as a remedy to alleviate pain and cure disease. A description of the apparatus, which essentially consists of (1) an oven to enclose the affected part (2) a suitable covering for the skin to absorb perspiration and prevent blistering and (3) some means of generating heat.

The treatment to any given part occupies from one half to one hour and the temperature reached in the bath varies from 250° to 340° F., the degree of heat required depending upon the sensation of the patient. Massage is indicated afterward, especially if there is any swelling or exudation. The effects of this extreme heat locally are: a relaxation of the tissues, an increase in the circulation with dilatation of the bloodvessels, a numbing of the sensory nerves, a marked perspiration and often a change from an unhealthy to a healthy metabolism.

Swelling is diminished, pain is relieved, stiffened joints and muscle-nerves move freely.

The writer detailed the effect of this treatment in twelve selected cases, including Colles's fracture, sciatica, lithemic pains, contusion to lumbar region, coccygodynia rheumatoid arthritis, neurasthenia spinalis, old dislocation of the hip, subacute rheumatism and neuritis, in all of which good results were noted with oftentimes a cessation of all symptoms and cure. In some cases but one treatment was required, in others many were given. A similar result was also noted in thirty-five cases selected from the literature of the subject.

DISCUSSION.

Dr. IRVING M. SNOW heartily commended this form of treatment, and said it is superior in rheumatoid arthritis. He had arthritis of the shoulder joint of six months' duration, which was cured by this form of treatment. The heat was applied for half hour, after which Swedish movements were given.

Dr. FRIDOLN THOMA, stated that he has used this method of treatment in muscular rheumatism and neuritis, but does not believe that he used such a high degree of temperature as is stated in the paper. He asked whether such a high degree of temperature could alter the circulating bloodcells.

[NOTE.—Dr. Ullman calls attention to the leucocytosis as occurring after cold baths and massage. Winternitz and Thayer have shown a leucocytosis following the cold bath in typhoid fever. The general stimulation of heat or cold and the mechanical effect of massage would produce this effect, by causing a return to the circulation of leucocytes stagnant in various parts of the body. The effect of heat generally applied for a sufficient length of time will induce sweating, which if in excess would produce a similar result as severe diarrheas, such as in cholera—namely, an inspissation of blood. In this condition the solid elements of the blood increase relatively as the fluid portion decreases. In accordance with the inspissation the red and white corpuscles increase per cubic millimeter, and so also the specific gravity.]

Dr. CHARLES G. STOCKTON read a paper on

CYCLIC OR PERIODIC VOMITING IN CHILDHOOD.

The writer reported a case of what was held to be characteristic cyclic or periodic vomiting in a child. It first appeared when the child was three years old, and occurred at intervals of six or twelve weeks thereafter, for a period of five years, when the attacks declined in frequency and severity, and have now quite disappeared. The seizures were ushered in by a day or two of dulness with inactivity of the bowels; the appetite usually good. The vomiting occurred suddenly and was repeated sometimes with severe retching at intervals of half an hour or an hour. The ejecta appeared to be pure gastric juice, rich in hydrochloric acid, which acidity declined as the attacks passed off. After vomiting for about a week, during which there was very alarming prostration, constipation of the bowels and diminution of the urinary output, improvement appeared as suddenly as did the onset. In forty-eight hours the child seemed as well as ever, and continued to be perfectly well in the interval. The affection was apparently in no way related to any other ascertainable condition, and was not precipitated by over-eating or other faults in hygiene. The writer assigned this case to a group which he thinks differs from the cases reported by Leyden, which occurred in adults, and those reported by Boas, in which there was hypochlorhydria, and from other groups not answering to the description of pure cyclic vomiting in children. Hypodermoclysis and enteroclysis were recommended as means of averting the dangers of collapse. Several fatal cases were referred to.

DISCUSSION.

Dr. IRVING M. SNOW referred to his case of cyclic or periodic vomiting noted in Dr. Stockton's paper. In this case the history pointed strongly to a neurosis. The father of the child was an alcoholic and died in an insane asylum; his father was alcoholic; the child's mother had convulsions; four other children had convulsions, and one died of epilepsy. The child was nineteen months old when first attacked and when seen was eight years old. The vomiting came on periodically and was then continuous, so that such an attack gave one the impression of a tubercular meningitis, *i. e.*, vomiting, irregular pulse and respiration, scathiod abdomen, and the like. The bowels were regular and there was no fecal accumulation and therefore no intestinal toxemia. The symptoms ameliorated as the child grew older and treatment had but little effect. Dr. Snow asked whether an excess of hydrochloric acid was noted in Dr. Stockton's case.

Dr. DEWITT SHERMAN said that we should not overlook the foods ingested preceding an attack. He referred to gastric cases of vomiting occurring after children's tea parties and following exposure to cold. Dr. Sherman saw a case this summer which was also seen by Dr. Holt, of New York, in which a child, after taking a cold bath and then partaking of chicken, which was afterwards found to have been preserved in cold storage was attacked with severe vomiting and prostration, and the urine showed albumen and casts. This was called by Holt cyclic vomiting. A peculiar phenomenon noted in the child's case was a reversed peristalsis of the small intestine. It seemed that all those who partook of this chicken were attacked with vomiting and diarrhea and Dr. Sherman therefore differs with the diagnosis of Dr. Holt and regards this case as one of ptomaine poisoning. The fact that there was albuminuria and casts suggests that this was more than a neurosis. This is also seen in the autopsy of one of Griffith's cases in which there was a necrotic area found in the walls of the stomach. Dr. Sherman's case afterward developed pneumonia and later a basilar meningitis, but there was no tubercular history in the case.

Dr. DELANCEY ROCHESTER said that the case mentioned by Dr. Sherman was evidently one of ptomaine poisoning, and should not be classed with the case reported by Dr. Stockton. Dr. Stockton's case belongs to a class occurring in children who are well in all other respects in whom the attacks of vomiting come on at regular intervals with languor and constipation.

Dr. ELI H. LONG reported a case of periodic vomiting in a child five years old. The doctor saw the case first in November, 1899. At this time the attacks came on every month, lasting about a week. There was no fever. The child died in the last attack, which was the sixth seen by the doctor.

Dr. CHAS. G. STOCKTON asserted that these cases when first seen do resemble a tubercular meningitis, but the history of previous attacks is of value. In answer to Dr. Snow he said that in his case the excess of hydrochloric acid secretion was noted as part of the affection. The stomach contents were examined in 20-25 attacks and were found to consist of pure gastric juice with an excess of hydrochloric acid. As the attacks subsided the hydrochloric acid was diminished. The hyperchlorhydria is then a part of the disease, unless there exists a primary diseased condition which will not allow its secretion. Dr. Sherman's case can be classified only after additional data, but it evidently is not one of cyclic vomiting. As to the etiology, like migraine and other allied affections, it seems an easy way of disposing of the case to call it a neurosis, but this does not exclude some possible form of infection.

Ratchford claims an increase in uric acid to be a cause. Forscheimer speaks of a dilatation of the colon. Constipation is noted during the attack, but indican is not found until the last. Acetone and casts were found in Griffith's case. The theory of necrosis as noted in Griffith's case may be the same as that noted in cholera, due to the great starvation of the tissues for water, and Johnston, of Washington, therefore recommends enteroclysis and hypodermoclysis.

Attendance, 30.

Section on Ophthalmology, Otology, Rhinology and Laryngology, December 17, 1900.

Reported by GEORGE F. COTT, M. D., Secretary.

The fourth meeting of this section for the season was held December 17, 1900, Dr. **Frank Whitehill Hinkel** in the chair.

Dr. **J. C. Clemesha** described a case with a foreign body in the lens. In the last week of November, according to the patient, while working at the locomotive shops at Depew, something flew in his left eye. He was not incapacitated, however, and continued the work until the second week in December, when he visited the Buffalo Eye and Ear Infirmary.

On examination of the eye, vision was 20-70; there was no congestion, pain or photophobia. With focal illumination there showed on the anterior capsule of the lens, and in its upper and inner quadrant an irregular shaped opacity, gray in color, and not exceeding .5 centimeter in any direction. In the center of this opacity was a minute dark spot and behind and in the substance of the lens was another minute opaque spot somewhat triangular in shape. The rest of the lens-capsule was clear. The condition pointed to foreign body lodged in the lens substance, the dark spot in the capsular opacity being the point of entrance, while the corneal had cleared in a like manner as after a needling operation. The nature of the substance, metallic or otherwise, could only be determined by the use of the sidereoscope.

In discussing the case described by Dr. Clemesha, Dr. Hubbell said that, although there was no scar or other evidence of a wound of the cornea, yet the opaque dot on the anterior capsule of the lens with a black-looking speck at its center, and a further opacity in the lens substance near its center, which showed a doubtful reflex of the ophthalmoscope, would lead him to suspect the presence in the lens of a minute foreign body. Moreover, the patient believed the vision was affected in that eye since the time of the supposed injury.

Dr. A. A. HUBBELL then read a paper entitled,

THE ETIOLOGY AND TREATMENT OF CONCOMITANT STRABISMUS—A RECONSIDERATION.

After referring to the histories of the theories of strabismus, he discussed, briefly, the physiology of vision, and then detailed the cause of strabismus. He drew the conclusion that it was primarily and essentially a nerveopathic condition, and entirely discarded the theory that it is muscular, as is so often held. There might be secondary changes affecting the ocular muscles and adjoining aponeurotic tissues, but these were not primary. The child had normal muscles before squinting, as shown by the normal ocular movements. Squint, when present, disappears under deep narcosis. Dr. Hubbell said the rotation of squinting eyes, in which secondary changes have not taken place, are of full normal extent.

The treatment, even operative, had reference only to the changes of the forces of innervation. The so-called functional or optical treatment will be successful in the majority of cases, if it can be commenced early enough. In convergent strabismus, which begins at one and a half to three and a half years of age, glasses would restore parallelism, if worn constantly, as soon as child would be old enough to do so without accident. After squint has existed permanently for three to five years, the spectacle treatment will be successful only in a small portion of cases. After glasses have been tried several months or a year without success, a properly selected operation may then be resorted to.

DISCUSSION.

Dr. GEORGE C. BLACKHAM, of Dunkirk, said he came to learn rather than to express an opinion. He intended to touch upon only one point—the general physiology. The human mind seeks some simple explanation for all cases. That is not good physiology. It is quite as possible to be the external muscle of the eye, which is deficient, as the other. We don't know why some parts of the body should be stronger, longer, or weaker than other parts. So in many cases we see, simple causes are quite possible. Many causes contribute to the same result.

Dr. **Lucien Howe** said he could see no reason for prescribing convex glasses for children who are hardly more than infants. A glass itself is a dangerous neighbor to the eye under such circumstances, and it is possible to obtain relaxation of the ciliary muscle more completely by weak solutions of belladonna. It is well-established that this can be used constantly for months or even years without any evil effects and in these young children he has frequently observed a convergent strabismus disappear when only occasional applications were made. Indeed, it is a question if this would not occur in a considerable percentage without any treatment whatever. In all cases, however, the children would be taught a few letters at as early an age as possible, in order that the vision of each eye might be accurately tested, and if this begins to decrease then, and not until then, more active treatment or operation is advisable.

Dr. A. G. **Bennett** then read a paper on

THE INFLUENCE OF THE VERTICAL MUSCLES IN THE PRODUCTION OF ASTHENOPIA.

He said: the most fascinating work of the ophthalmologist is, in my opinion, the correction of muscular anomalies. It is to the initiated a simple matter to make a diagnosis of heterophoria, and to correct with a prism or a tenotomy the offending muscles, but an experience of nine years taught me that nothing is so elusive and no condition of the eyes so full of seeming contradictions as a case of heterophoria. When first I undertook this work a case of esophoria was treated by tenotomy of the internal rectus or by a prism base out, esophoria by tenotomy of the internal or prism base in, hyperphoria by prism base down or tenotomy of superior rectus. The question of latent errors was much insisted on and a patient was given prisms to develop or make manifest the supposed hidden error. A more extensive experience has shown me that a prism of tenotomy of either of the lateral muscles seldom is of much avail in correcting a horizon deviation.

If the prisms be used, they act only as a crutch to a weak muscle, which, by lack of use, becomes weaker still, or if operation be done, sooner or later, the old trouble is back with all its virulence. With the exception of a full tenotomy to correct a convergent or divergent squint, and which I have to plead guilty to having performed several times with a mental resolve that, God being willing, one of these days sufficient knowledge will be vouchsafed me that I may relegate to the limbs of obsolete operations this unscientific procedure, I am proud to say, I have not operated on an internal rectus for esophoria or on an external rectus for exophoria for the last five years. Nor have I prescribed prisms more than three or four times for either condition, or have they been successful when prescribed.

From an experience garnered from some 3,000 private cases and 1,500 dispensary patients during the last five years, not all to be sure cases of muscular trouble, but having among them a considerable number, I have arrived at some conclusions which are satisfactory to myself, which have enabled me to relieve my patients, and I trust not without some interest to other members of the profession.

To begin with esophoria, Dr. Gould, some years ago when editor of the *Medical News* of Philadelphia, expressed his scepticism as to its frequent occurrence, saying that in an experience of some thousands of cases, it was the rarest condition. This is an expression of opinion that I can endorse, and without going into statistics, would state that 6° of esophoria is uncommon and then is accompanied by a hyperopia which, when corrected, almost invariably corrects the esophoria. If however this does not occur and symptoms of eyestrain are not relieved, look elsewhere for the trouble, and the most likely place to find it is in the superior or inferior rectus. The slightest vertical deviation may be the key to the whole problem. Latent esophoria or exophoria, I do not believe in, but latent hyperphoria I know exists; it can be demonstrated. I have seen only ⅛° of hyperphoria, a difference in sursumduction of 3°. If now with painstaking care you arrive at the full amount of hyperphoria and correct preferably by tenotomy, no further trouble will be experienced from the esophoria.

Esophoria is apt to be more troublesome and run into higher degrees, but many cases of exophoria are dependent upon incorrected hyperphoria or anophoria, and simple cases that are not relieved by prism exercise will not get any permanent improvement from tenotomy of the external rectus, and that those cases that are relieved by a tenotomy would have done just as well by exercise. There still remains, however a class of cases in which none of the foregoing methods accomplish any good, and in these cases probably the error will be found in the declination of the vertical meridian and the adjustment of the eye to the correct position by the methods devised by Stevens, may prove the solution of this problem. This method, however, is too new for me to speak on with any feeling of assurance, though I have seen some good results at Dr. Stevens's hands, but have had no personal experience. In cases of marked hyper-exophoria, the correction of the hyperphoria and the establishment of strong convergent power, by means of prism exercise, has rendered me excellent service; indeed, the correction of the hyperphoria alone, in many instances, has satisfied the patient though the exophoria was as much in evidence as ever.

The correction of hyperphoria is not a simple matter. The question at once arises, which eye is at fault? Is the hyperphoric eye in correct position, or is it too high, or is the other eye too low? a question that is not always easily solved. Or, again, are both eyes too high or too low? Here comes in the exceeding value of the tropometer,an instrument without which no ophthalmologist can keep house. It is a grevious mistake to cut a left superior rectus when the right eye is low and a prism base down before the left will not give your patient comfort when he needs a prism base up before the right; but the phorometer and Maddox rod will not give you the slightest inkling as to which muscle is at fault. The tropometer, too, is of great service in that class of cases which when perfectly refracted and showing orthophoria still manifest symptoms of eye-strain. Some of the happiest results I ever had have occurred in just this class of patients. The tropometer revealed anophoria and a tenotomy of both superior recti has proved the diagnosis correct by almost immediate relief from suffering.

Valuable as the tropometer is, it is sometimes difficult to determine in cases of hyperphoria which is the muscle at fault. The markings on the instrument are 10° apart and in cases in which the error is not large the movements of the eye both up and down may appear normal. In such cases I am in the habit of ordering a temporary prism base down before the hyperphoric eye, and in most cases this proves the correct treatment and a permanent prism or tenotomy of the offending superior rectus is performed. I have had some cases in which the prism in this position has not proved satisfactory and reversing the lens and putting it before the other eye has brought about the desired relief. Particularly true is this in elderly people and my experience is that although in the vast majority of vertical tensions the error will be either that of hyperphoria or anophoria, the majority of the minority will be found to be patients over fifty years of age.

There are cases of strabismus, either convergent or divergent, in which the relief of the vertical tension will do more for the cure of strabismus than a tenotomy of the internal or external rectus, and no case should be operated on until the upward and downward rotation has been thoroughly investigated. I showed a case of cured divergent strabismus before the surgical section of the Academy last April, in which the externi were intact and orthophoria was present with an adduction of 50°. My treatment in this case had been the dropping of the left eye 9° and the right 4°, which left the eyes level and straight. Exercises were given with prism base out until the weakened interni recovered their lost tone, when the patient was relieved of distressing headaches and a disfiguring ocular defect.

DISCUSSION.

Dr. Lucien Howe.—The author has said in his discussion that he determined the exact position of the eye by means of the tropometer. I am quite sure, however, that a longer experience with that instrument would have shown that it is not possible to speak accurately of lowering one eye a certain number of degrees and elevating another a corresponding distance. For at least two years, I have made frequent use of this instrument, not only in private practice but also occasionally at the Buffalo Eye and Ear Infirmary. The fact is that if a patient is told to look up as far as he can and the degree of supraducation measured, the patient may in the next minute turn the eye still farther up, by five or even ten degrees. In other words, we can only approximate a measurement in this way by taking the average of a considerable number of observations. At no one time can we say the eye turns up six degrees or seven degrees or any other definite distance.

Section on Pathology, December 18, 1900.

Reported by F. W. McGUIRE, M. D., Secretary.

The fourth regular meeting was held at the Academy rooms, Tuesday, December 18, 1900, twenty Fellows being present, with Dr. Eugene A. Smith in the chair, who called the section to order at 9 p.m.

It was ordered that the minutes for the meeting on October 16th be omitted; whereupon the minutes of the November meeting were read and approved.

Dr. EUGENE WASDIN, U.S. Marine Hospital Service, read a paper entitled,

THE ACUTE INFECTIOUS DISEASES.

The author prefaced his remaks by saying that the conclusions presented had been reached after a very careful study of the acute infections, more especially yellow fever, to which he had given close study, both clinically and experimentally.

The acute infections bear a very decided relationship to each other, including in the list Asiatic cholera. Peste, diphtheria, tuberculosis, typhus fever, typhoid fever, yellow fever, scarlet fever, whooping cough, measles, influenza, pneumonia and idiopathic tetanus. They embrace a large proportion of the diseases incident to man. He next discussed the three potentials of germ life: (1) the law of specificity, that each causative germ can produce but one disease; (2) that of producing toxins; (3) that of producing sepsis.

He went quite minutely into the question of natural immunity and took up the different theories relating thereto: (1) retention theory; (2) the abstraction theory; (3) phagocytosis; (4) alexin theory of Buchner; (5) antitoxin theory of Erlick. He showed that in each of these theories, with one exception of Buchner's, referred to a conferred immunity after or during the infection. He maintained that where there is natural immunity, in the true sense of the word, there is no initial intoxication or no disease. He showed how the growth of the germ was dependent upon environment, and cited yellow fever as an instance. The germ at a temperature of 30° to 40° F. will not produce the disease. A true primary immunity does exist in part, he thinks, to the alexins and in part to other conditions not fully known. For example, influence of atmospheric environment, as in case of scarlet fever.

The author next considered the different types of disease depending upon the development of its different potentials. If toxic, to a moderate degree there was produced the ephemeral type; if toxic to excess, the siderante type, while if the septic potential was predominate, you had the septic forms of disease. As a type of toxic diseases he took diphtheria and septic peste.

He then took up each disease and showed how this formula worked in each individuald isease. For example, yellow fever—there is a form of disease lasting but a few days, with slight symptoms, with slight intoxication, this would be the ephemeral type. Then again, you have the intensely toxic form, ending in death in forty-eight hours—the siderante type.

Lastly, you have the usual type, with its well defined clinical and pathological characteristics, the septic form of the disease.

Dr. Wasdin maintained that in yellow fever the mode of invasion was constantly by way of the respiratory tract. In this way he took up peste, typhoid fever, cholera, pneumonia, diphtheria, influenza, tetanus and tuberculosis, and showed how they each followed the above formula. He went into the mode of infection in peste quite carefully. He maintained that the explanation of Calamette regarding pneumonical peste as being secondary to a primary lymph infection was far-fetched, and believes that this infection is primary in the lung.

In this connection he discussed origin of typhoid fever. He maintained while it was not impossible or improbable to have its origin in the intestinal tract, yet evidence was gradually accumulating to show that the disease is frequently a respiratory one: (1) In certain cases of typhoid the organism could not be found in the intestine and colonies were found in the lung; (2) The bacillus is not in the stools until a variable time after symptoms of infection appear; (3) the fact that the intestinal canal is so well protected with its tough lining, gastric juice, etc., compared to the frail tissues of the lung.

From the fact that many and probably all the infectious diseases were able to colonise in the lung and produce there specific disease, he reasoned that the water from our streets, lawns, and the like, should receive as much attention, as far as the protection against spread of the acute infections, as the drinking water.

In this relation he also urged more rigid inforcement of regulations looking to the abatement of the "spitting nuisance"; moreover, that all sputum from cases of acute infectious diseases should be sterilised with almost as much caution as the alvine discharges in cholera and typhoid fever.

DISCUSSION.

Dr. **Charles G. Stockton** had listened to the paper with keen interest. He could not understand why the author was so emphatic that infection took place through the lungs and not through other sources; he said he hesitates to accept that the law applies similarly in different diseases, and thought that there would be considerable change in the law before it could be accepted clinically.

Dr. **DeLancey Rochester** thought some of the operators might give us some light in the discussion of acute infection. He thought that in mild cases of infections we might have the formation of an antitoxin.

Dr. H. R. GAYLORD did not see how tuberculosis could be applied to the law and did not think the intestinal tract should be left out of a consideration regarding the infection taken place there, because the germ was not found in the tract. He said the lungs were undoubtedly more easily infected than intestinal tract. He believes as Dr. Stockton that there would have to be more investigations before the law could be accepted clinically.

Dr. LUDWIG SCHROETER asked Dr. Wasdin to explain why the infection did not always give reactory symptoms at the point of infection.

Dr. Wasdin, in answer to Dr. Schroeter's question said he could not tell why, but cited twenty-five cases of typhoid in the Marine ward in which in every case there was a diseased area of lung. He said he thought foci were always present in lung tissue, but required very close examination to find it.

Dr. CHARLES G. STOCKTON wished to know why he considers the lung foci primary and not secondary.

Dr. Wasdin said he could not prove it to be so, but thought it was so, and hoped future investigations would prove it.

Dr. S. Y. HOWELL wished to know if the typhoid germ was found in lung before being found in the intestinal tract.

Dr. Wasdin said at the Pasteur Institute they found the greater infection about the second week, commencing very small on first day and increasing each day.

It was moved and seconded that a vote of thanks be extended to Dr. Wasdin for his interesting and instructive presentation of the subject. Carried.

Dr. A. L. BENEDICT gave some notes on Globulin and albumose as found in urine, with the view of soliciting coöperation in this work.

Discussion by Dr. Clowes.

CAUTION REGARDING HERPES.—In the treatment of the various forms of herpes, it should be borne in mind that poultices, fomentations, lotions, and the like, are apt to soften the walls of the vesicles and facilitate their rupture, thereby prolonging instead of curtailing the disease, and adding considerable to the patient's discomfort. Powdered oleate of zinc is the best local application, of a weak solution of acetate of lead with glycerine.—*Jour. Med. and Science.*

Clinical Report.

RUPTURE OF HEMATOMA OF THE BROAD LIGAMENT—OPERATED.

BY Dr. L. G. HANLEY,
Gynecologist, Buffalo Hospital of the Sisters of Charity.

REPORTED BY B. DENNIS, M. D.

MRS. B., age 34, married; number of children, two. Admitted to hospital, October 8, 1900. Patient was pulseless at wrist, breathing hurriedly, restless and in extremis, presenting all evidences of severe internal hemorrhage. Patient had not menstruated for five months and thinking she was pregnant, sent for her family physician to exmine her. During the examination she was seized with a severe pain, became weak, till she was in the condition above described. This occurred fourteen hours′ before being admitted to hospital. Strychnia and brandy were given, pro re nata, by the family physician.

The ordinary preparation given, and abdomen opened, when about two quarts of clotted blood was removed from the pelvic cavity. The uterus was drawn up through the opening, which showed extensive bleeding from broad ligament of right side. Ligament clamped and all attention directed to stimulating patient by injections of normal salt solution under the breast—strychnia, brandy, etc. Abdominal cavity flushed with saline solution, when patient rallied sufficiently for completion of work. There was a tear one and one half inches long, extending down from right cornu of uterus, which was sutured in order to check hemorrhage from wound of serosa. The wound in ligament closed after sac was removed. Abdomen filled with normal salt solution. The ordinary surgical technique was observed. Patient left hospital in twenty-eight days.

One and one half years ago hysteropexy was performed by intra-abdominal shortening of round ligaments. Examination showed no evidences of fetus or chorionitis villi, though she had not menstruated for five months.

THE constitutional treatment in chronic inflammation will depend upon the disease which is at the bottom of the process, rather than on the process itself.—*Cheyne and Burghard.—Railway Surgeon.*

FREE incisions into an inflamed part will often prove of the very greatest value in acute inflammatory conditions.—*Cheyne and Burghard.—Railway Surgeon.*

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SMALLPOX AND VACCINATION.

HEALTH Commissioner Wende has issued a proclamation concerning vaccination and the prevalence of smallpox in various parts of the United States, which is timely and to the point. He called attention to the fact that the disease was prevalent in states contiguous to Buffalo, and that safety lay in proper and immediate vaccination, especially in schools and factories and other places where numbers of people are gathered together. The Health Commissioner's warning note is in no sense an alarm or a panic breeder. It is a quiet, conservative statement of fact. Its only fault, if fault it has, is its conservatism. This may be justified in view of the fact that the Pan-American Exposition is about to open its doors, yet the fact remains that smallpox does exist in almost epidemic form in many localities and that it will in all probability be brought into Buffalo, if not before then, by some of the Pan-American visitors. To meet this possibility, wholesale vaccination is an absolute necessity. Of course, no power exists to compel vaccination in every case, yet the majority of people are sensible-minded and will submit.

Naturally, that brave and devoted band of fanatics, who hang on the honeyed words which flow from Mother Eddy's inspired lips, will hold out and decline to entertain the "belief" that there is such a disease as smallpox. So will some of the followers of that eminent and spooky divine who lately discoursed upon the subject. Of course, we must meet and deal with cranks of all descriptions; natural cranks, fool cranks and imbecile cranks, like the anti-vaccinationists, anti-vivisectionists and anti-humanity howlers, who delve into the depths of the dusty mysteries of spook-chasing and Eddyite beliefs.

The Health Commissioner has done his duty thus far. He cannot be held to blame should smallpox make its appearance in Buffalo. It is impossible to give definitely the smallpox figures as they stand at this writing, but an adequate idea may be had when it is known that there are approximately 8,000 cases now recorded as compared with 1,700 of a year ago. This in itself is a serious increase, but the real seriousness of the situation becomes apparent when it is reported that smallpox is on the increase in New York city, and that it is in Ohio, Pennsylvania and Canada. The district physicians have held a meeting to consider the question of vaccinating in the public and private schools. Leaving outside the ethical question of district health physicians doing charity vaccinating among school children, the majority of whose parents are perfectly able to pay a family physician for the operation, the fact that school children should be vaccinated and that promptly is apparent. If they are not protected they should not be admitted to the schools. Let the fanatics pray for deliverance from an epidemic, but in the meantime let us vaccinate.

The second free public bathhouse in Buffalo was thrown open for use January 2, 1901. It is located at the corner of Stanislaus Street and Woltz Avenue. The first day it was in use 350 persons availed themselves of its privileges. This bathhouse is in the center of the Polish district and must prove of great benefit to the residents of the eastern portion of the city. The new bathhouse is larger than the first one erected, is a stone and frame structure, and is equipped with every convenience.

Dr. Samuel Floersheim, of 218 East 46th Street, New York City, announces his intention to publish a second paper on the use of the suprarenal capsule in organic heart disease. He requests the readers of this journal to send him the reports of their cases as follows: (1) the condition of the heart and pulse rate; (2) the effect on the heart and pulse, and pulse rate within ten minutes after the suprarenal powder; three grains, is chewed and swallowed without water, by the patient.

The University of Pennsylvania has made a move, which it is believed is the beginning of the revolutionising of medical instruction. It is the establishment of a complete curriculum of medicine. The branches are so arranged, that each year's work leads up to the succeeding, and above all, the same conditions for entering the medical department are exacted from candidates, as those which cover other departments. Thus, the degree of M.D. is a college degree. This excludes that large proportion of inadequately educated students, who hitherto have constituted the mass of incompetent material which has so seriously burdened the profession.

THE New York Academy of Medicine through its committee on library, has recently made its annual report. From this we note that the number of books in the library, November 31, 1900, was 89,000 volumes, including duplicates, of which there are 36,105 volumes. The books added during the year, not including duplicates, were 3,649 volumes. In the circulating department, 971 books and 832 journals were issued to 194 readers. 11,520 readers have registered during the year in the reading room, and probably many others have used the library, but not registered. The library is growing rapidly, the additions annually for the last four years being at least 3,500 volumes a year—in 1898, when the library of the New York Hospital was donated to the Academy 7,000 volumes—without including duplicates. 991 journals in many languages are on file, and add 1,135 bound volumes this year to the shelves. Including the duplicates the natural growth annually amounts to about 5,000 volumes.

DR. GEORGE M. GOULD, the accomplished editor of the *Philadelphia Medical Journal*, has been discharged from his office by the Board of Trustees without notice, complaint or criticism of his editorial management of that journal. This course, to say the least, is unusual and according to all precedent may be justly characterised as unfair, no matter what reasons may have led to such summary procedure. Dr. Gould has made a good journal and his readers will be sorry to miss his trenchant pen from its pages.

It is rumored that he will establish another journal, provided he receives substantial encouragement from the medical profession. We bespeak success for the enterprise should it materialise.

A PRESS dispatch informs us that experiments lately made by E. H. Fairchild in the operating rooms of the Albany Hospital, have proved that it is possible to get a series of photographs of a surgical operation, and thus to provide lantern slides as a basis for surgical instruction. Operations by Drs. Albert Vander Veer and Willis G. Macdonald have been successfully photographed in series, each stage in the operation being represented by a photograph taken instantaneously and without in anyway interfering with the operation.

Students of surgery find it difficult to secure satisfactory instructions, because during an operation the surgeons are too much absorbed to lecture, and afterward the opportunity is gone. By means of a special camera a series of photographs can be taken, showing all that any student can see, and with these as a basis the surgeon can give an illustrated lecture. A course of illustrated lectures explanatory of all the common operations, and also of the exceptional and remarkable operations that come so rarely as to make it impossible to secure clinical material for every class, can be built up around such a group of pictures.

INFLUENZA has invaded almost every northern state to a degree that in many localities has seriously embarrassed business. Buffalo has suffered its full share from the disease which, however, has not been markedly fatal except with the aged, or from those previously suffering from some systemic disease. Moist and sodden weather, such as has prevailed for a considerble period during the winter, furnishes a favorable medium for the propagation and transmission of the germs. At such a time it behooves everybody to be cautious about exposure and to be particular with reference to warm underwear. Mouth breathing, too, which is so very common, should be absolutely interdicted in the open air.

THE new State Pharmacy Law of New York went into effect the beginning of the year, when the three boards and three laws formerly existing, were replaced by one board and one law having jurisdiction over the whole state. This is an advantage over the old regulations and while the new law is open to criticism in some particulars, it is regarded as being much superior to the confusion of the three boards. One of the important provisions of the law is the annual registration under restricted conditions,' not of the pharmacists themselves, but of every pharmacy store, dispensary or place where medicines are sold.

The president of the state board is Mr. R. K. Smither, of Buffalo, and Mr. Sidney Faber, of New York, is secretary and treasurer. Each of the three divisions have their president and secretary. Of the western section, Mr. M. A. Palmer, of Olean, is president, and Mr. George Reimann, of Buffalo, is secretary.

Dr. G. Frank Lydston, of Chicago, is well known to the profession as an able teacher, a clever writer and a successful practitioner. He has written one of the best works on genito-urinary diseases of recent days, and he is a frequent contributor to medical periodicals of excellent professional papers.

But there is another field in which Dr. Lydston is rapidly achieving fame—namely, in general literature. He not only tells a story well, but he writes one with grace and makes it entertaining. His "Over the Hookah" has enabled his readers to beguile many an hour and his numerous sketches, scattered here and there, are sources of delight to those familiar with them. We are prompted to these remarks because he has lately sent out to the world an entertaining volume entitled, Panama and the Sierras; a Doctor's Wander Days. It is a description of scenes witnessed and experiences met by the author during a journey across the Isthmus of Panama. It is profusely illustrated from photographs taken by the author and is published by the Riverton Press, Chicago.

PERSONAL.

Dr. Charles A. L. Reed, of Cincinnati, O., president of the American Medical Association, spent a day or two in Buffalo during the latter part of January. He was the guest of Dr. William Warren Potter and was en route to Albany to attend the ninety-fifth annual meeting of the Medical Society of the State of New York.

Dr. George T. Stevens, of New York, spent a few days in Buffalo recently and during his visit delivered an address before the Section on Ophthalmology, etc., of the Buffalo Academy of Medicine, the title of which is noted elsewhere. Dr. and Mrs. Frank Whitehill Hinkel, of Park Street, gave a reception to Dr. and Mrs. Stevens, Monday, January 21, 1901, from 3 to 5 o'clock, which was attended by physicians and their wives in large numbers.

Dr. J. C. Johnson, of New York, assistant pathologist of Cornell University, read a paper before the Section on Pathology, Buffalo Academy of Medicine, Tuesday evening, January 15, 1901, entitled, sarcoma and sarkoid growth of the skin. Previous to the meeting Dr. Johnson was entertained at dinner at the Saturn Club by Drs. Grover W. Wende and Eugene A. Smith.

Dr. Eugene Wasdin, U. S. Marine Hospital Service, now stationed in Buffalo, has been tendered by the Italian Government the cross of officer of SS. Maurizio et Lazzaro, in recognition of his services in verifying and confirming the Italian studies and discoveries regarding the nature of yellow fever. The permission of congress to accept the decoration doubtless will be granted.

Dr. F. W. Barrows, professor of histology and biology at Buffalo University Medical College, was elected president of the New York State Association of Science Teachers at its recent annual meeting held at Rochester.

Dr. Wm. D. Haggard, Jr., of Nashville, has been elected to fill the chair of gynecology and diseases of children in the medical department of the University of Tennessee, formerly occupied by his father for many years.

Dr. N. G. Russell, of Buffalo, has tendered his resignation as physician to the fourth district, to which position he was appointed some months ago, and Dr. H. K. De Groat has been appointed to fill the vacancy.

Dr. Thomas Lothrop, of Buffalo, whose term as manager of the Buffalo State Hospital expired with the beginning of the year, has been reappointed for a period of four years, by Governor Odell.

Dr. Charles D. Aaron, of Detroit, Mich., U. of B., '91, has been elected clinical professor of diseases of the stomach and intestines in the Detroit College of Medicine, Detroit, Mich.

Captain Harry Mead, M.D., of Buffalo, has tendered his resignation as assistant surgeon of the 65th Regiment, N.Y. National Guard.

Dr. Chester L. Carlisle, of Buffalo, has been appointed medical interne at the Manhattan State Hospital, New York.

OBITUARY NOTES.

Dr. Thomas Brown Wheeler, of Montreal, died suddenly at the Murray Hill Hotel, New York, on January 10, 1901, of apoplexy. He was near 70 years of age.

Dr. Ulysses Higgins Brown, of Syracuse, N.Y., died suddenly in the city of New York, whither he had gone on business, December 27, 1900, aged 49 years. He was a licentiate of the Medical Society of the County of Onondaga, 1878, a member of the Medical Society of the State of New York, and an ophthalmologist of distinction.

Dr. Robert V. K. Montfort, of Newburgh, N. Y., died in that city December 29, 1900, aged 65 years. He was an alumnus of Albany Medical College, '59, served as a medical officer during the civil war with distinction, was formerly health officer of Newburgh, and was a prominent educator, having served many years as clerk of the board of education and superintendent of public schools of Newburgh.

Dr. J. Henry Fruitnight, of New York, died at his home in that city December 18, 1900, aged 49 years. He was an alumnus of Bellevue Hospital Medical College, 1875. He was a pediatrician of note, a member of the American Pediatric Society, and a frequent contributor to the the literature of that branch of medicine. He did not believe, evidently, that the title of "professor" was the goal of a physician's ambition, for he was great enough to have refused two offers of that kind, on the ground that teaching might appropriate time that rightfully belonged to his patients.

Dr. Wm. H. Pleuthner, of Buffalo, died suddenly January 17, 1901, aged 32 years. He was an alumnus of the University of Buffalo, class of '91, and had been engaged in the practice of his profession in this city since graduation. Dr. Pleuthner was a native of Buffalo and is survived by a widow and a brother.

Dr. Wm. H. Parkhurst, of Frankfort, N.Y., died January 22, 1901, aged 88 years. He was one of the oldest physicians in the Mohawk Valley, having been in constant practice since 1839, when he graduated at Geneva Medical College.

Dr. Charles Wesley Purdy, of Chicago, Ill., died in that city January 21, 1901, aged 55 years. He was born in Kingston, Ont., in 1846, and was graduated from Queen's University. Dr. Purdy made a special study of diseases of the kidneys and wrote several books on the subject.

Dr. Richard Beverly Cole, of San Francisco, Cal., died in that city January 17, 1901, aged 71 years. Dr. Cole was a graduate of Jefferson Medical College, class of 1848, and had been practising and teaching his profession for over 50 years. He was a genial companion and an accomplished physician.

SOCIETY MEETINGS.

THE Medical Union held its nineteenth annual meeting and banquet at the Genesee Hotel, Wednesday evening, January 23, 1901. The following-named members were present: Drs. A. H. Briggs, R. L. Banta, Vertner Kenerson, S. S. Green, A. E. Diehl, W. S. Renner, S. G. Dorr, J. C. Thompson, De Witt C. Green, H. D. Ingraham, Chas. E. Congdon, L. B. Dorr, W. D. Greene, Brown, Fell, J. H. Potter, Rasbach, Geo. H. Westinghouse and Frederick Preiss. Letters of regret were read from Drs. Wende, Phelps and Park. The following are its present officers: President, Dr. J. H. Potter; vice-president, Dr. F. B. Rasbach; secretary and treasurer, Dr. Frederick Preiss; executive committee, Maj. A. H. Briggs, Dr. R. L. Banta, and Dr. Frederick Preiss.

THE Buffalo Academy of Medicine held meetings during the month of January, 1901, as follows:

Section on Medicine.—Tuesday evening, January 8th. Program: Arterio-sclerosis, DeLancey Rochester; Reminiscences of malaria, D. A. Morrison.

Section on Pathology. —Tuesday evening, January 15th. Program: Sarcoma and sarkoid growth of the skin, J. C. Johnson, assistant pathologist, Cornell University; Urticaria, Grover Wende.

Section on Ophthalmology, Otology, Rhinology and Laryngology.—Monday evening, January 21st. Program: The pose of the body as related to the type of the cranium and the direction of the normal visual plane—an anthropological study from an ophthalmological standpoint, George T. Stevens, of New York.

Section on Obstetrics.—Thursday evening, January 22d. Program: Symphysiotomy, P. W. Van Peyma; The kidneys and their relation to operations, Stephen Y. Howell.

THE Rochester Academy of Medicine—Section on surgery—held its regular monthly meeting in the hall of the Reynolds Library, Wednesday, January 9, 1901, at 8.15 p.m. The following program was carried out: I. Presentation of cases—(*a*) Case of double Colles's fracture, one wrist treated with splints, the other with Moore's dressing, Richard M. Moore; (*b*) Case of comminuted fracture of the patella, William L. Conklin; (*c*) Case of mediastinal abscess, John O. Roe. II. Reports of cases: (*a*) Cancer of cecum, with presentation of specimen, William L. Conklin; (*b*) Case of fracture of the tibia only, Richard M. Moore. III. Paper, A diagnostic sign of complete reduction of fracture at the lower extremity of the humerus, and a method of treatment, Richard M. Moore; IV. Paper, The histological method for the diagnosis of rabies, Charles Wright Dodge. John O. Roe, chairman; E. Wood Ruggles, secretary.

THE Niagara Falls Academy of Medicine held its regular monthly meeting at the office of Dr. F. Guillemont, 550 Main Street, on Monday evening, January 14, 1901, at 8.45 p.m. A paper was read by Dr. J. H. Miller: subject, Fever, cause and treatment.

COLLEGE AND HOSPITAL NOTES.

AT THE Buffalo Hospital of the Sisters of Charity the annual meeting and election of officers of the active staff was held on Wednesday, January 9, 1901, with the following result: President, Dr. L. G. Hanley; vice-president, Dr. H. C. Buswell; secretary, Dr. Nelson W. Wilson; executive committee, Drs. J. J. Mooney, Eugene A. Smith, W. D. Greene. Dr. C. M. Daniels was tendered a re-election as secretary, but announced that he could not serve. The staff, however, in recognition of Dr. Daniels's hard work in the interests of the institution unanimously re-elected him in spite of his statement. On his positive declination of the office, a new ballot was ordered and Dr. Wilson was elected. Following the meeting, a banquet was served to the staff by the hospital management.

Dr. Hanley has appointed the following committees: On nurses—Drs. S. Y. Howell, C. M. Daniels, Geo. H. Westinghouse. On hygiene—Drs. De Lancey Rochester, A. J. Colton, Charles S. Jewett. On internes—Drs. H. Y. Grant, B. H. Daggett and Max Kaiser.

Reports made at the annual meeting showed the hospital to be in excellent condition. The wards are well filled and private rooms have seldom been vacant during the year just ended. The next meeting of the staff will be held on the second Wednesday in March.

THE New York School of Clinical Medicine has opened up a new department of neurology—namely, the study of the neuroses and psychoses of spirit and drug diseases. Dr. T. D. Crothers, of

Hartford, Conn., has been elected professor, and will deliver lectures and give clinical instruction on inebriety from alcohol, opium, cocaine and other narcotics, particularly on the symptomatology, treatment and medico-legal relations. These lectures will begin February 18, 1901, in the lecture room of the college, 328 West 42d Street, New York City. This is the first effort to give special systematic instruction on these diseases, and indicates a great want in the profession of scientific knowledge in this field.

OAK GROVE, Flint, Mich., is a hospital for the treatment of nervous and mental diseases and is presided over by Dr. C. B. Burr, a most distinguished alienist and neurologist. The hospital is delightfully located according to any and every viewpoint. It enjoys the shade of stately oaks, the plateau on which its splendid group of buildings stands receives abundance of fresh air, while protected from the severity of high winds, its water supply is pure, and its drainage ample. Adding to these natural conditions, art has done its best in the way of buildings with most modern methods of construction as to plumbing, ventilation, and sunlight, so that the result is a hospital especially adapted to the purposes for which it is intended, which embraces also the comforts and even luxuries of a modern home.

A most artistic calendar for 1901 has lately been issued by the hospital that contains photogravure scenes, which amply illustrate the leading features of this splendid institution.

THE medical college of Western Reserve University, Cleveland, O., stands third among the medical colleges of the country in respect to the amount of its endowment. With it are associated the three largest and most complete hospitals in Cleveland, placing at the disposal of its students 700 beds in hospitals as a clinical field, during the greater part of the school year, supplementing the laboratory side of teaching with the practical clinical side in an eminent degree. Therefore students of this college have the very best facilities for a practical medical education.

THE Sheppard and Enoch Pratt Hospital, located at Towson, near Baltimore, Md., is a thriving institution for the care and treatment of patients suffering from mental and nervous diseases, presided over by Dr. Edward N. Brush, who is well known in Buffalo. The ninth annual report of the hospital is before us, from which it would appear that since the union of the two benefactions, indicated by its name, the prospects of the institution have become very bright. Especially would this seem to be the case since the hospital is engaged in studies looking toward a better knowledge of insanity, which may be regarded as one of its most important duties. It has been charged that psychiatry has not kept pace with the scientific advances of medicine in general. We do not think the statement is quite true; nevertheless, this is not the place in which to discuss the question.

What we desire to point out is, that few hospitals of this kind are prepared to afford students opportunities for study and for research work in their laboratories; hence the position which the Sheppard and Enoch Pratt Hospital has taken will prove of great interest to the profession of medicine.

THE Buffalo State Hospital has issued its twenty-ninth annual report to the State Commission in Lunacy. Dr. A. W. Hurd, the superintendent, is well known as an accomplished alienist and under his administration the hospital is making subtantial progress. The recent addition of the Elmwood building for acute cases has enabled the hospital management to deal with these cases in a much more satisfactory manner. It is to be noted that the percentage of recoveries in recoverable cases admitted is 49.71 per cent., while the percentage of recoveries to the total number of admissions is 10.67 per cent. This shows the effect of modern methods in the management of mental and nervous diseases.

THE Buffalo Eye and Ear Infirmary presents its twenty-third annual report. From this it would appear that the infirmary is progressing on the lines mapped out in its original charter. The number of new cases treated during the year is 2,905.

Book Reviews.

MODERN MEDICINE. By JULIUS L. SALINGER, M. D., Demonstrator of Clinical Medicine, Jefferson Medical College; Hematologist to the Jefferson Medical College Hospital; Pathologist to the Lying-in Charity Hospital, Philadelphia; Assistant Pathologist to the Philadelphia Hospital. And Frederick J. Kalteyer M. D., Assistant Demonstrator of Clinical Medicine, Jefferson Medical College Hospital; Hematologist to the Jefferson Medical College Hospital. Octavo, pp. 801. Illustrated Philadelphia and London: W. B. Saunders & Co. 1900. [Price, cloth, $4.00 net.]

It was a great task which Drs. Salinger and Kalteyer set out to perform when they undertook to produce a book on medicine, for at first glance, one would imagine that the field was just about full as it could conveniently be without crowding, yet they have done their work, and done it well. The result is, this volume, which is very properly called Modern Medicine, and it is no exaggeration to say that it is one of the most complete works of its kind which has yet appeared.

There are reasons for this statement, written with such works within easy reach as the gloomy yet exhaustive Osler, the interesting Tyson, the instructive Anders, and the incomparable Pepper system.

Modern Medicine is complete because it covers all the specialties in clinical medicine which are generally crowded out of the more pretentious works, and at the same time, does not slight any of the subjects which belong in such a work. This will be better understood when it is explained that at the outset the specialties are considered, and in such manner as to be wholly instructive as well as entertaining. Physical diagnosis, bacteriological examinations, gastric contents, and the examination of urine, blood, sputum and feces, are all well considered. The wonder is that some of the medico-literary bright lights have not thought of this combination before. It would certainly have helped along the practice of medicine, and made physicians more self-reliant, just as this book will serve to do.

As one gets along into the pages of Modern Medicine, the charm and the simplicity and the convenience of its arrangement becomes more and more apparent. Under clinical bacteriology, one finds all one cares to know in a general way concerning the pathogenic bacteria, which is very delightful for it removes the necessity of bothering one's head about anything but etiology, pathology, symptoms, diagnosis and treatment when the diseases are reached. That's one of the new things about Modern Medicine, too, when you come to think of it. And when you do finally get into the disease proper, you get another shock, if you've got any old fogyish ideas in your head. You find everything in a condensed form, which is readable, understandable and interesting. Really, it is almost like a story in some places, it is all so simple and yet so complete, for in spite of condensation, there is nothing of importance neglected or lacking. Instead of the page after page and page and page again and again of typhoid and tuberculosis, descriptive, explanatory, statistical, argumentative and pathologic beyond all hope of redemption, which one must wade through in some of the standard works, in Modern Medicine we have 12 pages of typhoid and 21 pages of tuberculosis, and the latter covers the disease in all its phases and in all the organs. Yet, in those pages devoted to the subject the authors have told everything of moment concerning the diseases from the beginning to the end. They do not take up space telling what they have done; they confine themselves to telling all about what the disease does and how properly to cure it.

Beginning with symptomatology and semeiology, they go on to physical diagnosis, clinical bacteriology and laboratory methods, and then Part I. looms into view with the infectious diseases. After this comes the diseases of the circulatory and respiratory systems; the digestive tract and kidneys; constitutional diseases; diseases of the blood and ductless glands, nervous system and muscles; intoxications and sun stroke, and diseases due to animal parasites, which with a very cleverly arranged index completes the book.

A few words are due the illustrations. There are not many, but those which are shown are in keeping with the literary portion of the book—they are excellent, novel in some respects and modern in every way. In no other work on general medicine will there be found such exquisite plates of the malarial parasite in all forms and conditions. These plates were colored and in themselves stamp the work as modern. Quite an interesting map of the world is shown, which by means of shading of various degrees shows where malaria is most prevalent. One of the darker spots, on North America is that part of the country immediately surrounding Lake Erie and Ontario, and the dark spot means malaria; but since these maps are credited to Mannaberg, Drs. Salinger and Kalteyer cannot be held responsible for this slight error of location which makes Buffalo a malaria center.

Summed all up, Modern Medicine is an ideal book, prepared by modern men with modern ideas who have that happy and also too rare faculty,of saying what they have to say about a disease and stopping when they've said it. This is the first edition. Others will follow as a necessity,for it is a work which in years to come will stand in single-volume state and dignity, beside the more pretentious and heavier volumes and systems of more expansive authors and editors.

N.W.W.

RHINOLOGY, LARYNGOLOGY AND OTOLOGY, AND THEIR SIGNIFICANCE IN GENERAL MEDICINE. By E. P. FRIEDRICH, M. D., Privat docent at the University of Leipzig. Authorized translation from the German. Edited by H. HOLBROOK CURTIS, M. D., Consulting Surgeon to the New York Nose and Throat Hospital and to the Scarlet Fever and Diphtheria Hospitals. Octavo, pp. 348. Philadelphia and London: W. B. Saunders & Co. 1900. [Price, $2.50.]

Within the last few years so many books have been written upon the subjects of rhinology, laryngology and otology, that it is refreshing to find one entirely unlike any of the others, and just such a work is Dr. Friedrich's book. Nothing similar to it has been written on these subjects up to the time of its publication in either the English, German, French or Italian languages, although Mauritz Schmidt's Diseases of the Upper-air Passages, and some other works on kindred subjects have been written, considering the relation of such diseases to general medicine.

This is a book by a man familiar with the pathology and symptoms of general diseases, as well as by one who is an expert in the diagnosis and treatment of diseases of the nose, throat and ear. This work, instead of being a compilation, is a union of the author's large experience in the clinic at Leipzig with that of his fellow workers in his specialty in Germany, Austria, England, Italy, France and America; then experiences he found recorded in such records as Haymann's Handbook, Frankil's Archiv für Laryngologie, The Archives of

Otology, Lemon's Centralblatt für Laryngologie, The Journal of Laryngology, as well as in many recent monographs and text-books.

The work is rich in material, every sentence is the statement of an established clinical fact verified in the post mortem room, or in the laboratory, which makes a detailed review of the work impossible. Diseases of the nose, throat and ear are considered in their relation to each other and in their relation to (1) diseases of the rest of the respiratory tract; (2) diseases of the circulatory system; (3) diseases of the digestive tract; (4) diseases of the blood; (5) chronic constitutional diseases; (6) acute infectious diseases; (7) chronic infectious diseases; (8) diseases of the kidneys; (9) diseases of the skin and of the sexual organs; (10) diseases of the eye; (11) intoxications; (12) nervous diseases. In an appendix, nasal reflex neuroses, the significance of some of the cranial nerves in rhinology and otology, and diseases of the meninges and of the cerebral sinuses and their significance in connection with the nose, larynx and ears, are all ably and exhaustively dealt with.

Such an enumeration serves to explain how complete this book is. The chapters treating of nervous diseases are interesting and rich in new material, as are also those upon the exanthemata and their sequels. Dr. Curtis, the editor, is to be commended for presenting to English readers this valuable book.

The translation has been well done, for the translator has not only succeeded in presenting the author's meaning, but has also presented to us the text in natural English prose.

Messrs. W. B. Saunders & Company are to be congratuated not only upon the style of this book, but also for having presented to medical readers in this country the valuable Hand-Atlases, which are among the best of the medical books which have of recent years been translated from the German into English. W. S. R.

PHYSICIANS' MANUAL OF THERAPEUTICS. Referring Especially to the Products of the Pharmaceutical and Biological Laboratories of Parke, Davis & Co. Flexible morocco. Duodecimo, pp. 526. Detroit. 1900.

We are more than glad to present a notice of this small volume in these pages, because, among other reasons, it is a book that cannot fail to be useful to every practising physician. Moreover, it contains much valuable information relating to drugs and pharmaceutical products not found elsewhere, at least not available in such convenient form.

It is a matter of common remark, not only by the laity, but among intelligent doctors that homeopathy has compelled physicians to adopt more palatable methods in the administration of remedies. Whatever moiety of truth this may contain, we are of the opinion that the chemical and scientific pharmaceutical laboratories are chiefly responsible for improvements in this respect.

This book represents great labor, much expense, and vast knowledge of the needs of medical practitioners. A brief description of the work is merited.

Part I. is entitled, Therapeutic Suggestions, and, as its title indicates, comprises various useful hints on the prophylaxis and treatment of diseases, the names of which appear in alphabetical order, as subheads. A number of useful tables have been arranged to assist the inquirer in the differential diagnosis of the exanthemata, the calculation of metric values, thermometric equivalents, and the like. The body of the book is given over to the department of materia medica, which is, in brief, an alphabetic catalogue of drugs and seems to be thoroughly complete and abreast of the period. No secret preparations are mentioned, nor is mention made of antiquated or obsolete remedies. The various preparations of the different drugs, such as pills, tablets, capsules and elixirs, are alphabetically listed under their respective heads and may be found without confusion or delay.

It is well printed in clear faced type on thin, strong paper, with rounded corners, and is bound in flexible leather. While the nominal price of the book is $1.00, we are informed that any subscriber to the JOURNAL will receive a copy without charge and prepaid, upon request addressed to the publishers.

THE READY-REFERENCE HANDBOOK OF DISEASES OF THE SKIN. By GEORGE THOMAS JACKSON, M. D., Professor of Dermatology, Woman's Medical College of the New York Infirmary, and in the Medical Department of the University of Vermont; Chief of Clinic and Instructor in Dermatology, College of Physicians and Surgeons, New York. New (3d) edition. In one 12mo volume of 638 pages, with 75 illustrations and a colored plate. Philadelphia and New York: Lea Brothers & Co. 1899. [Price, $2.50.]

A book whose distinguishing merits are clearly demonstrated by the fact that notwithstanding there are so many other books upon the same subject, and that the demand for the same is necessarily limited, this particular one has already passed into a third edition.

This present volume has not only been carefully revised, but numerous important additions have been made to the text on bulpiss, bunion, dermatitis from Röntgen rays, blastomycetic dermatitis, lupus pernio, pityriasis alba atrophicans and idiopathic multiple pigmented sarcoma. The additions include forty fresh pages together with six new illustrations.

Dr. Jackson still adheres to the old method of arranging diseases alphabetically, which is well enough in its way, but which lacks the advantages to be derived from systematic classification. It is likely that the author had in mind the convenience of students rather than that of professionals. At the same time the usefulness of the volume is not limited to the student class; there is, besides, much in it for both the general practitioner and the specialist. Dr. Jackson's book is remarkable for simplicity, clearness and directness, as well as for the vividness of the numerous clinical pictures. In short, it is one of the best reference books of the kind that has yet appeared—one that will be readily adopted by colleges as a standard text-book and that will be found to carry out fully its original intention. The mechanical features of the book are all that could be desired. G. W. W.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF NEW YORK. For the Year 1900. Ninety-fourth annual session, held at Albany, January 30, 31 and February 1, 1900. Edited by FREDERIC C. CURTIS, M. D., Secretary. Philadelphia: Wm. J. Dornan, Printer.

As usual this society sends out its volume of transactions freighted with material that is of great scientific and general value, to every physician who is loyal to the best interests of the profession of medicine in the State of New York. An important part of the record are the reports of the standing committees. These are often overlooked by the reader, yet they contain much that deserves careful examination. Especially is this true of the reports of the committee on hygiene and of the committee on legislation. Probably it will surprise most persons to learn that 265 bills were introduced last year in the legislature affecting medical interests, either in general or in particular. It requires great activity on the part of the legislative committee to watch the progress of these bills, to promote them when useful, and to defeat them when pernicious.

The plan of publishing the proceedings of a state medical society in book form each year is a good one, and we hope to see it maintained in this body. It is a great convenience to find the whole record of work between the two covers of a single volume. The medical journals publish promptly elaborate abstracts of medical society work, so that it can be examined within a week or two by everyone interested. Then, later, the official book giving a verbatim report becomes a permanent record in the library, always accessible. If the proceedings are published in a journal owned and maintained by the society, they become scattered through a whole year, and are often difficult to find when wanted, as the particular number of the journal desired is either mislaid, lost, not received in the mail, or loaned to a friend who has forgotten to return it.

Every experienced worker approves the annual transactions plan of publication, whereas only the theorist favors the medical journal ownership and method.

STUDIES IN THE PSYCHOLOGY OF SEX. The Evolution of Modesty. The Phenomena of Sexual Periodicity. Auto-Erotism. By HAVELOCK ELLIS. Pages xii.—275. Philadelphia: F. A. Davis Company. 1900. [Price, $2.00.]

Those who have followed Havelock Ellis in his studies on criminology, psychopathia sexualis, and allied subjects, will be pleased to know that the distinguished author has put forth a work of incomparable interest and value, and one most timely in this age of erotism and commercialism. The author is well qualified to write on the psychology of sex, and his opinion, and conclusions are weighty and convincing. In the present work, he deals chiefly with the evolution of modesty, the phenomena of sexual periodicity, autoerotism and several appendices, which treat of the influence of menstruation on the position of women, sexual periodicity in men and the autoerotic factor in religion.

The author deals with the subject in a masterly manner, giving copious quotations in support of his views upon the several theories advanced.

The relation of modesty to sexual life is pointed out in a very interesting manner, the author believing that, like all the closely allied emotions, it is based on fear—an agglomeration of fears, two especially, one of much easier than human origin and supplied solely by the female; the other of more distinctly human character, and of social, rather than sexual origin. The author then cites examples, showing the periodicity of modesty and lack of modesty in the lower animals and in the nude and semi-nude races of men. A large amount of observation and collected facts are brought together in this volume on subjects not taught in the schools and colleges or referred to in the text-books on medicine, and to the enquiring mind of the professional man it is a welcome addition to our otherwise scanty literature on this subject.

The book is well printed on good paper and strongly bound.

W. C. K.

REPORT OF THE MEDICAL RECORDS OF THE MUTUAL LIFE INSURANCE OF NEW YORK. For fifty-six years – 1843 to 1898. By ELIAS J. MARSH, M. D., and GRANVILLE M. WHITE, M. D., Medical Directors. Published by the Company. 1900.

This very interesting report was prepared by the medical directors of the Mutual Life Insurance Company of New York, to accompany the diagrams and tables exhibited by the company at the recent Paris exhibition, representing the mortality records of that company from the commencement of its business in 1843 to the end of the year 1898. The tables are accompanied by colored diagrams, in which each disease has some distinctive color in each age period, showing at a glance the comparative mortality with other diseases. These tables are most ingeniously constructed and show an immense amount of labor and skill to prepare them. The tables showing the mortality percentage of the individual diseases at each period of life, also deserve great praise, and all testify to the careful collection and arrangement of facts and figures made by the medical officers of the company.

Some interesting facts about these tables may not be amiss. During the fifty-six years of existence, there have been in all 46,525 deaths. In the year 1884 there were only three deaths; in the year 1898, there were 3,421 deaths. These large figures for 1898 show partly to what a monumental size the company has grown and the beneficence bestowed by it upon thousands in their hour of greatest need.

The company is, indeed, to be congratulated in having at the head of its medical board two such capable and efficient men as Drs. Marsh and White and these tables show what good use can be made of the facts gathered by the large insurance companies.

The book is handsomely prepared and published in the company's own printery.

W. C. K.

A TREATISE ON FRACTURES AND DISLOCATIONS. For Practitioners and Students. By LEWIS A. STIMSON, B. A., M. D., Professor of Surgery in Cornell University Medical College, New York. New (3d) edition. In one 8vo volume of 842 pages, with 336 engravings and 32 full-page plates. Philadelphia and New York: Lea Brothers & Co. 1900. [Price, cloth, $5.00 net; leather, $6.00 net.]

Fractures and dislocations occur so often and indeed, constitute such a large proportion of the surgical practice of the average physician and surgeon, that it behooves him to become thoroughly familiar with the subject at the hands of the best teachers and thorough familiarity with the best authors. Stimson ranks as such an one, and his treatise is one of the best and most practical dealing with fractures and dislocations in the English language.

Since the work first appeared in two volumes, for the sake of convenience, it has been reduced to a single volume; this was in the edition of 1899 that became exhausted within a year. The advances in the methods of diagnosis and treatment rendered it necessary to rewrite the fracture section to a large extent for the second edition. In this one all of the improvements are embodied, including notable changes relating to dislocation.

The student will find this treatise par excellence, for his use, and the practitioner cannot fail to appreciate its value for reference. It is well illustrated, especially have the *x*-rays been made to serve an invaluable purpose in the delineation of many bone and joint injuries that heretofore have defied the engraver's art.

Professor Stimson deserves the congratulations of his surgical colleagues, as well as of all his other readers upon the excellent treatise that he has given us.

"FESTSCHRIFT" in honor of Abraham Jacobi, M. D., L.L.D., to Commemorate the Seventieth Anniversary of his Birth. May 6, 1900. International contributions to Medical Literature. New York: The Knickerbocker Press. 1900.

Owing to the fact that this volume was misdirected, its delivery to the JOURNAL has not been made apparent until lately, hence the delay in noticing this splendid testimonial to our distinguished confrére. It is vouchsafed to but few men to attain the esteem of his professional colleagues to the degree that Dr. Jacobi has done. This book will testify to that fact as long as time shall wend its way adown the ages.

The particulars that led to this form of testimonial have been so recently published that everyone is familiar with them, hence need not be repeated here. The "Festschrift" contains the contributions of fifty-five men of distinction, residing in this country and in Europe, all written for the special occasion and for this book.

Obviously, it is a volume that cannot be reviewed in the sense of the word as applied to a treatise on practise, but we desire to record our appreciation of the work, not only for the splendid tribute it pays to one of our most distinguished American physicians, but, likewise, for its scientific value. A splendid etching of Dr. Jacobi adorns the festschrift as a frontispiece.

LABORATORY DIRECTIONS FOR BEGINNERS IN BACTERIOLOGY. An Introduction to Practical Bacteriology for Students and Practitioners of Comparative and Human Medicine. By VERANUS A. MOORE, B. S., M. D., Professor of Comparative Pathology and Bacteriology, New York State Veterinary College, and of Bacteriology, Cornell University Medical College, Ithaca, N. Y. Duodecimo, pp. 159. Illustrated. Second edition, enlarged and revised. Boston: Ginn & Co., 1900. [Price, $1.05]

Professor Moore has given his students a most compact and valuable little work on this subject, and so successful has it been in filling the gap that other teachers have adopted it in their laboratories. There are many excellent treatises on bacteriology, but very few which a student beginning the subject can use, hence the popularity which Professor Moore's little work has achieved.

One feature about all the books published by the members of the Cornell University faculty, is that nothing is left unsaid which the student is supposed to know. The minutest details are explained to the beginner and hence thoroughness is expected and demanded as he advances in the science. The idea is fully carried out in the outline of bacteriology and no one can go through its pages without becoming acquainted with the technique and the essentials of bacteriological investigation. No doubt the primer is but the beginning of a comprehensive work on the subject, and no one is better qualified to develop such a work than Professor Moore.

W. C. K.

DISEASES OF THE INTESTINES. A Handbook for Practitioners and Students of Medicine. By MAX EINHORN, M. D., Professor of Medicine at the New York Post-Graduate Medical School and Hospital, and Visiting Physician at the German Dispensary, New York. Small 8vo, pp. xiv.—391. New York: William Wood & Co. 1900.

The reputation so justly made by this author through his treatise on diseases of the stomach, issued a few years ago, justifies the expectation that this work will prove of great value to the profession. It is, indeed, a continuation of that subject and, taken together, the two furnish the most complete exposition of the principal diseases of the digestive tract that has yet appeared.

In this book will be found carefully set forth a description of the methods of examination and treatment, which is really the most important subdivision of the treatise. This is a subject less understood by the average physician than any other belonging to the study of intestinal disorders, and will prove of great assistance to every one who has to do with general practice.

Other chapters are devoted to the consideration of special conditions, such as hemorrhoids, appendicitis, intestinal obstruction, nervous affections of the intestines and intestinal parasites, and present these conditions in most excellent form. Especially to be commended is the chapter relating to nervous disorders of the intestines, which deals with obscure conditions heretofore in many respects little understood or greatly neglected. We predict a favorable reception of this treatise by the medical profession in this country.

A MANUAL OF OTOLOGY. By GORHAM BACON, A B., M.D., Professor of Otology in Cornell University Medical College, New York; Aural Surgeon, New York Eye and Ear Infirmary. With an introductory chapter by Clarence John Blake, M. D., Professor of Otology in Harvard University. Second edition, revised and enlarged With 114 illustrations and three colored plates. 12mo. pp. 422. Philadelphia: Lea Brothers & Co. 1900. [Price, $2.00.]

In less than two years a second edition of Bacon's Manual of Otology has been called for, and the response has been met by a searching revision throughout. The number of illustrations has been increased and additions have been made to the text to the extent of some twenty-five pages. The new matter thus incorporated includes a more extended consideration of the Schwartze-Stacke operation, and the use of the normal saline solution in intravenous injections. Dr. Blake, who has given his special favor to the work, has also enlarged his introduction.

The work is exceedingly practical, and is a most complete epitomisation of modern otology. We again commend it unqualifiedly, especially to the student. A. A. H.

SAUNDERS'S QUESTION COMPENDS. Essentials of Histology. By LOUIS LEROY, B. S., M. D., Professor of Histology and Pathology, in Vanderbilt University, Medical and Dental Departments; City Bacteriologist to Nashville, Tenn.; Bacteriologist to the State of Tennessee. Arranged with questions following each chapter. Duodecimo, pp. 231; 72 illustrations. Philadelphia: W. B. Saunders & Co. 1900. [Price, $1.00 net.]

Since the issue of the first volume of the Saunders's Question compends, over 175,000 copies have been sold. This enormous sale is indisputable evidence of the value of these self helps to students and physicians. Twenty-five volumes have been issued and all enjoy the confidence of the profession as the successive editions testify. The present volume is in its infancy and belongs to the more recent additions to this little library. It is a worthy rival for honors and the author has made of it a very useful and instructive guide. The author has collected within a limited space and in convenient form the essential facts of histology, and at the same time has endeavored not to sacrifice clearness and intelligibility to the necessarily great condensation. The facts are well presented, the illustrations are many and well selected and to the busy practitioner it affords a very handy volume to refer to in his spare moments.

The volume is bound to correspond with the other volumes of this series. W. C. K.

TRANSACTIONS OF THE AMERICAN SURGICAL ASSOCIATION. Volume XVIII. Session, held May 1-3, 1900. Edited by DEFOREST WILLARD, M. D., Ph D., Recorder of the Association. Philadelphia; Wm. J. Dornan, Printer.

This volume contains the papers read before this distinguished association, May 1-3, 1900, at which time Dr. Roswell Park, of Buffalo, was elected president. He will preside at the meeting to be held at Baltimore, May 7-9, 1901.

The first paper in this book is the address of the president, Dr. Robert F. Weir, of New York, who chose for his subject Perforating ulcer of the duodenum. This exceedingly rare affection is learnedly discoursed upon, and the author's own experience, limited to a single case, is graphically described, fatal results following an operation. He gives in detail fifty-one cases of the disease, which makes the paper the most complete contribution to the literature of the subject that is in existence. A number of papers follow on subjects akin to this, and the entire volume is replete with excellent contributions to the literature of surgery.

This association always issues a book full of interest and instruction, and this one is no exception to a well-established rule.

INTERNATIONAL CLINICS. A Quarterly of Clinical Lectures and Especially Prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Pediatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose and Throat, etc. Edited by HENRY W. CATTELL, A. M., M. D., with the collaboration of John B. Murphy, M. D., of Chicago; Alexander D. Blockader, M. D., of Montreal; H C. Wood, M. D, of Philadelphia; T. M. Rotch, M D., of Boston; E. Landolt, M. D., of Paris; Thomas G. Morton, M. D., and Charles H. Reed, M. D., of Philadelphia. Volume III. Tenth series. 1900. Philadelphia; J. B. Lippincott Co.

The contents of this number embrace papers or lectures on genitourinary diseases, therapeutics, medicine, neurology, surgery, obstetrics and gynecology, diseases of the eye and ear, laboratory method, and a monograph on the scientific modification of milk.

The foreign contributors are: J. W. Ballantyne, A. Boissard, Merigot de Treiguy, Alfred Fournier, Fernand Lagrange, A. B. Marfau, A. Pinard and Fr. Rubenstein.

Dr. William C. Krauss contributes an instructive article on the use and care of the microscope. Dr. L. Webster Fox discourses upon injuries of the eyelids and eyeballs in a well-illustrated lecture. There are many others of value, indeed, this number is replete with excellent lectures.

TRANSACTIONS OF THE TWENTY-FIRST ANNUAL MEETING OF THE AMERICAN LARYNGOLOGICAL ASSOCIATION Held in the City of Chicago, Ill., May 22, 23 and 24, 1899. New York: D. Appleton & Co. 1900.

At the meeting during which these proceedings were had Dr. William E. Casselbery, of Chicago, served as president. In his address he referred to the fact that the association was organised at Buffalo, June 3, 1878.

Since that time great progress has been made in the field of work occupied by this distinguished body of men. They, themselves, have been the chief promoters of the scientific advance of laryngology in this country, and must view with satisfaction the work they record in these annual volumes. The books though unpretentious show careful editing, and each contains many papers of value, while some are distinguished for originality of thought or for new methods of procedure. Dr. Frank Whitehill Hinkel, of Buffalo, contributes an interesting paper to this volume on the Operative treatment of Frontal and maxillary sinusitis. Other papers of value, numbering twenty-eight in all, serve to make a volume of interest to every laryngologist.

BOOKS RECEIVED.

A Text-Book of Pharmacology and Therapeutics, or the Action of Drugs in Health and Disease. For the use of Students and Practitioners of Medicine. By Arthur R. Cushny, M. A., M. D., Aberd. Professor of Materia Medica and Therapeutics in the University of Michigan Medical Department, Ann Arbor. New second edition In one handsome octavo volume of 732 pages, with 47 engravings. Philadelphia and New York: Lea Brothers & Co 1901. [Cloth, $3.75 net.]

Physical Diagnosis in Obstetrics. A guide in Antepartum, Partum and Post-partum Examinations for the Use of Physicians and Undergraduates. By Edward A. Ayers, M. D., Professor of Obstetrics in the New York Polyclinic; Attending Physician to the Mothers and Babies Hospital. Octavo, pp. 283. Illustrated. New York: E. B. Treat & Co. 1901. [Price, $2.00.]

Introduction to the Study of Medicine. By G. H. Roger, Professor Extraordinary in the Faculty of Medicine of Paris; Member of the Biological society; Physician to the Hospital of Porte D'Aubervilliers. Authorised translation by M. S. Gabriel, M. D., with editions by the author. Octavo, pp. 551. New York: D. Appleton & Co. 1901.

Transactions of the Medical Association of the State of Alabama. Annual meeting held at Montgomery, Ala., April 17-20, 1900. G. P. Waller, M. D., Secretary. Montgomery, Ala. Brown Printing Co. 1900.

Proceedings of the American Medico-Psychological Association. Fifty-sixth annual meeting held at Richmond, Va , May 23-25, 1900. C. B. Burr, M. D., Secretary. Published by the society. 1900.

Diseases of the Heart; Their Diagnosis and Treatment. By Albert Abrams, A. M., M. D., San Francisco, Consulting Physician for Diseases of the Chest, Mt. Zion Hospital and the French Hospital. Illustrated. Pages, 172. Chicago: G. P. Engelhard & Co. 1900. [Price, $1.00.]

Urinary Diagnosis and Treatment. By J. W. Wainwright, M. D., Member of the American Medical Association, New York State Medical Association, New York County Medical Association, etc. Illustrated with numerous engravings and colored plates, 140 pages. Chicago: G. P. Engelhard & Co. 1900. [Price, $1.00.]

Rudiments of Modern Medical Electricity. Arranged in the Form of Questions and Answers. Prepared Especially for Students of Medicine. By S. H. Monell, M D., New York, Professor of Static Electricity in the International Correspondence Schools; Founder and Chief Instructor of the New York School of Special Electro-Therapeutics. 12mo. pp. 165. New York: Edward R. Pelton, 19 E. 16th St. 1900. [Price, $1.00.]

Students' Edition, A Practical Treatise of Materia Medica and Therapeutics, with Special Reference to the Clinical Application of Drugs. By John V. Shoemaker, M. D., LL.D., Professor of Materia Medica, Pharmacology, Therapeutics, and Clinical Medicine and Clinical Professor of Diseases of the Skin in the Medico-Chirurgical College of Philadelphia; Physician to the Medico-Chirurgical Hospital. Fifth edition. Thoroughly revised Pages vii-770. Philadelphia: F. A. Davis Co. 1901. [Extra cloth, $4.00 net; Sheep, $4.75 net.]

A Clinical Treatise on Fractures. By William Barton Hopkins, M. D., Surgeon to the Pennsylvania Hospital and to the Orthopedic Hospital and Infirmary for Nervous Diseases. Octavo, pp. 268. Illustrated. Philadelphia: J. P. Lippincott Co. 1900.

An American Text-Book of Physiology. Edited by William H Howell, Ph. D., M. D., Professor of Physiology in the Johns Hopkins University. Second edition, revised. Vol. II. Philadelphia and London: W. B. Saunders & Co. 1901. [Price, cloth, $6.00 net; Sheep or half Morocco, $7.00 net.]

Experimental Research into the Surgery of the Respiratory System. An Essay awarded the Nicholas Senn prize by the American Medical Association for 1898. By George W. Crile, A. M., M. D., Ph. D., Professor of Clinical Surgery Western Reserve University; Surgeon to St. Alexis Hospital; Associate Surgeon to Lakeside Hospital, Cleveland. Octavo, pp. 114. Second edition. Philadelphia: J. P. Lippincott Co. 1900.

LITERARY NOTES.

THE *Electrical Review*, of New York, devotes its issue for January 12, 1901, to a review of the history of electrical development during the nineteenth century. Every branch of the field of electrical invention and endeavor is covered in twenty-one special articles by eminent experts. This historical number is embellished with seventy-three portraits of electrical engineers and inventors, whose work has assisted in the building up of the industry.

THE *New York State Journal of Medicine*, published monthly by the New York State Medical Association, has appeared. It will publish the transactions of the association, including original contributions and items of news pertaining to the organisation. The name of the editor does not appear.

THE *Northwestern Lancet*, of St. Paul, Minn., appeared at the beginning of the year in a new dress. A change of editors has also taken place, Dr. Alexander J. C Stone, who has conducted it from the beginning gives up the chair to Dr. W. A. Jones. It starts off well under the new management.

HERBERT S. STONE & Co.,of Chicago, announce that they have in preparation, and will soon issue the following important work: A Text Book of Special Surgery, by Dr. Fronz Koenig, for practitioners and students, translated from the seventh German edition, which has but recently appeared, by Arthur B. Hosmer, M D., and edited by Christian Fenger, M.D. It is the authorised translation, and will consist of three large octavo volumes on an especially fine grade of plate paper, and each volume will contain in the neighborhood of 300 illustrations.

DR. M. HARTWIG, president of the Buffalo Academy of Medicine, has offered a prize of $50.00 for the best paper contributed by any member to the Academy during his term of office.

To govern the competitors for this prize the following rules have been adopted by the committee of award:

1. Papers entered for competition must be type-written or printed, and four copies of each paper must be submitted to the committee.

2. All papers must be in the hands of the committee, of which Dr. J. W. Grosvenor, 118 Plymouth Ave., is chairman, on or before July 1, 1901.

3. The announcement of the successful competitor will be made at the first meeting of the Academy after the coming summer vacation. J. W. Grosvenor, B. G. Long, S. Y. Howell, committee.

ITEMS.

THE manufacture of tissue phosphates, carried on for many years by the late Dr. T. P. Wheeler, of Montreal, will be continued as formerly without change of name.

M. J. BREITENBACH CO., of New York, well known as the American agents for Gude's pepto-mangan, have again sent out their year-book to the medical profession. The edition for 1901, which is precisely like its predecessors, is one of the most useful desk memorandum books with which we are familiar. Mr. Breitenbach conceived the idea of attaching to each wrapper a sticker advertising the Pan-American Exposition of Buffalo. In this way over 100,000 physicians are reminded at one and the same time of Gude's pepto-mangan and the Pan-American Exposition.

The following letter is self-explanatory:

New York, November 17, 1900.

MR. MARTIN H. SMITH, 68 Murray St., New York City.

Dear Sir—In reply to your favor of the 13th inst., we would say that we have submitted glyco-heroin to a careful pharmacological investigation. It affords us much pleasure to state that the ingredients of the formula are entirely compatible, and that the heroin is held in permanent solution. It seems to us that you have a very valuable combination of expectorants and sedatives in this formula, and that it will prove a very useful remedy in the class of cases in which it is indicated. Thanking you most cordially for your supply of glyco-heroin, we remain, Yours very truly,

FARBENFABRIKEN OF ELBERFELD CO.

THE post-graduate course in bacteriology, given under the personal supervision of Dr. W. G. Bissell, at the Dental Department U. of B., will begin February 18, 1901, at 8.15 o'clock p.m.

BUFFALO MEDICAL JOURNAL.

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Original Communications.

REMARKS ON THE WORK OF THE BUFFALO LABORATORY ON THE INVESTIGATION OF CANCER.[1]

BY HARVEY R. GAYLORD, M. D., Buffalo, N. Y.

MY appearance before you today is rather unexpected and I fear that coming unprepared, it will be impossible for me to give you more than a general statement as to the present status of the numerous investigations which are being pursued to determine the nature of cancer, and some idea of the relation which our laboratory holds to the general subject.

There probably has never been a period of greater activity in this field and investigations are being pursued in all parts of the world. The publications which have appeared as a result of this activity have been so extensive that it is extremely difficult to keep pace with them. Beside the great mass of material which comes to our hands, we have encountered and still continue to encounter unusual difficulties in interpreting the work of men approaching the subject from various standpoints. For this reason it has been necessary in some cases for us to go directly to the investigator and personally inspect his material.

The present activity in this field of research is unquestionably due, first of all, to the general belief that the number of cancer cases is slowly but surely increasing. This belief is based upon statistics which have been collected over a period of time and which, in their present form, leave no reasonable doubt that there is an actual increase in the number of cancer cases in all parts of the civilised world.

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[1] Read at the thirty-third annual meeting of the Medical Association of Central New York, held at Rochester, N. Y., October 16, 1900.

Another motive which has served to stimulate scientific research has been the feeling among scientists that so far as cancer is concerned, the scientific profession possesses less satisfactory knowledge about this disease than any other. It is an extremely difficult problem and one upon which it is impossible to dogmatise or speculate.

Naturally, the most burning question in connection with this disease is whether it is of parasitic nature or not. There are some facts which seem to make it almost impossible that cancer can be the result of parasitic activity, and at the same time these facts may not be in reality more stubborn than many others which have been overcome in the solution of other diseases which we, today, know are of parasitic origin. In attempting to solve the nature of the disease and especially to determine whether it is of parasitic nature, the attack has been principally along two lines, and has led, at least at the present time, to two opposing factions among those who advocate the parasitic theory. One group of investigators believes that the parasite of cancer will have to be found in the vegetable kingdom; while the other believes that in all probability certain bodies and formations which are found in cancer are animal parasites. A few years ago the literature contained many articles describing bodies and forms in cancer, which the authors attempted to interpret as protozoa. The idea that the parasite of cancer was a protozoan has fallen, during the last year or two, more into the background, owing to the activity of certain Italian investigators, who have attempted to show that these bodies are not of animal, but of vegetable nature and that the parasite of cancer belongs in the vegetable kingdom. Within the last year the most interesting publications have been by those who again advocate the animal nature of the parasite.

It will be seen that under these conditions, a well equipped institution with no axe to grind, and supported by the state, is extremely necessary and can serve the purpose, in a certain sense, of a clearing house for all of these conflicting investigations. This function we have attempted to perform and thus far, although we have carried out much original research, we have busied ourselves principally in the consideration of the relation of certain vegetable organisms to cancer. A report covering these investigations will be made to the legislature during the coming session and will later be published more in full.

Certain conditions are absolutely essential to the success of such a laboratory as the one in Buffalo. First of all, time is probably the greatest element of success. Cancer is a disease of great chronicity and the results which we have thus far been able to obtain in animals, which have thrown any light upon the question, have, as a rule, only been obtained after a considerable period of time. For this reason it is absolutely necessary that our work should be continued for a period of years if any profitable results are to be obtained. It requires a large and properly manipulated material, sufficient equipment and sufficient quarters; this last I am fortunately in a position to state will be provided for us during the coming year through the philanthropy of private individuals in Buffalo.

It may be of interest to you to know that the foundation of this laboratory has created widespread interest even in foreign lands, and since the period of its foundation Germany has formed a national cancer society, which proposes to undertake the work of collecting reliable statistics upon this subject. The English have, likewise, established a national cancer society and two institutions in London have provided funds for research. A benevolent lady of Boston has bequeathed to Harvard University a sum of $200,000, the income of which is to be devoted to the investigation of this subject. A year ago when in Europe, I found that all scientists were keenly interested in the innovation, so far as America is concerned, of a state undertaking work of this nature and I can assure you it has reflected no little credit on the State of New York, that she has been foremost in appropriating money for abstract investigation of scientific subjects of this nature.

I feel that my remarks have been very rambling, but what I wish most of all to impress upon this society, is that we require the support of the profession of the state, and that this support should be exerted upon the legislators who will pass upon the future appropriations for the continuation of the work. It, therefore, rests with the profession of the state to see that institutions of this sort are supported and continued, and it is especially necessary that all physicians should take an active interest, as we have been informed that there is a tendency among the legislators to raise the question at the next meeting of the legislature of the propriety of the state supporting scientific research at all. It is unnecessary for me to point out to you that although such a stand would be injurious to the interests of the people, the results would be especially unfortunate for the members of the medical profession. Certainly a profession which serves the people as does ours has a right to expect something from the state. For this reason I urge upon this society the necessity for support, if our work is to be continued. It requires years in a laboratory of this sort before definite conclusions can be reached; a fact, which legislators do not always appreciate. It would be unfortunate if the State of New York, having once taken a stand as advanced as that involved in establishing a laboratory for special research, should abandon the work, and I am sure that if the matter is intelligently presented to the legislators that they will appreciate not only the necessity, but the desirability of maintaining an institution of this character.

23 IRVING PLACE.

DISCUSSION.

Dr. J. W. WHITBECK, Monroe—We have heard the very interesting remarks of Dr. Gaylord on the progress of this work, and I need hardly urge upon this association the importance of aiding in this great movement. You all know the feeling of the people at large in regard to this matter, based mainly upon the expense incurred in carrying on such work, and it is in response to this feeling of the mass of the people that the legislators are influenced, as it seems to us, to not promote this work any more rapidly than the public demand it. It is unnecessary for me to say that it is proper for this association to take an active stand in this matter, in order to promote this great work, and by the appointment of a committee, whose duty it shall be to address the different members of this Association from time to time, and so keep them alive to the interests of this matter, that they may reach their representatives in the legislature. By having such a committee to watch opposing legislation and also to promote favorable legislation we, I think, will do great good in this matter, not only as physicians, not only as a scientific body, but also as patriots. I would therefore, move you, Mr. Chairman, that the chair appoint a committee of five, it being distinctly understood that Dr. Gerin shall be a member of this committee, whose duty it shall be to promote this great work.

Seconded by Dr. A. L. Benedict, Erie.

The PRESIDENT.—Are there any remarks upon the motion?

Dr. N. JACOBSON, Onondaga—I would like to ask what the purpose of this committee shall be, whether it is understood that this committee is appointed for one specific purpose or for the general subject of state support for scientific investigation. It seems to me that we want to be a little broader than the question that is before us. While we all admit that there is no more serious condition that afflicts mankind than malignant disease, while we recognise that with all the research, common as it is with us every day, it still eludes us, and that there is no more important study here, still, those of us who are interested in scientific work that is to be done by the various institutions of the state, feel that the state support for this institution is not only justified for itself, but is opening the way for the other institutions to claim support, and the support, not that they crave, but that they deserve, the support that the state owes all educational institutions, to coöperate with them and assist them in every way towards the end. They have in view the education of the people, the education of the profession and the good of mankind; and therefore, I feel that the purpose of this committee should not be restricted in any way, but that it should be a broad one, one that shall clear away any obstruction that it can that is in their road in the way of legislation, which looks toward the coöperation with scientific institutions and the advancement of knowledge in our work.

Dr. WHITBECK—I intend to have it cover that ground, namely, that this committee should interest itself in all scientific work and promote it, as far as in its power. Carried.

The President appointed as such committee, John W. Whitbeck, E. V. Stoddard, Monroe; Nathan Jacobson, Onondaga; John Gerin, Cayuga; C. M. Lee, Oswego.

FORMALDEHYDE.[1]

By A. A. YOUNG, M. D., Newark, N. Y.

FORMIC aldehyde, an oxide of methylene, is a gaseous substance, the molecular composition of which is C H2 O, or one atom of carbon, and one atom of oxygen united by two atoms of hydrogen in each molecule. It is readily soluble in water, producing about a 40 per cent. solution which borders upon saturation, and in this form it is found as an article of commerce. Upon evaporation of the solution beyond the point of saturation a re-arrangement of the atoms takes place within the molecule, the composition of which is now $C_3H_6O_3$, known as paraform, a white crystalline substance, which it will be observed, forms a molecule of twelve atoms instead of four atoms, as in the case of the gaseous substance. It is a well established fact in chemistry that the re-arrangement of atoms within the molecule produces an entirely different mass with entirely different characteristics and properties, notable examples of which are oxygen and ozone, or the diamond plumbago and charcoal. It is for this reason, I believe, without experimentation, that in this polymeric modification paraform loses in the transformation nearly all the properties of formaldehyde, including its preservative and germicidal actions.

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[1] Read at the thirty-third annual meeting of the Medical Association of Central New York, held at Rochester, N. Y., October 16, 1900.

In this connection it will be observed that when paraform is heated in an open vessel it vaporises, but the vapor on cooling deposits, as before, crystalline paraform by sublimation; but when formaldehyde is heated in an open vessel, and much less heat is required, formic aldehyde the germicidal agent, is given off vaporised, and so far as known is not redeposited as paraform; but upon the sides of the container, by slow evaporation, this polymeric modification is found deposited. This phenomenon indicates most clearly a chemical change; a change which means new properties and new characteristics; experimentation, so far as made, indicates the truth of this assumption. Paraform is, therefore, regarded by the writer as a by-product, a new formation, and cannot consequently be compared with formaldehyde.

They are not identical substances, though one may be formed from the other by synthesis or analysis. To convert one into the other requires a chemical change, a re-arrangement of the atoms within the molecule; it means a new chemical compound having entirely different characteristics and actions. Recognising this fact, it must be apparent to all that the properties of the one cannot be substituted for the properties of the other by inference, for the indications are that error must certainly follow as the result.

It is a mistaken notion that if formaldehyde be a germicidal agent, paraform, its by-product, as well must be one.

In this paper, therefore, only formic aldehyde, or its liquid solution, as found in commerce, known as formaldehyde (Merck), will be referred to.

Although formaldehyde was discovered as early as 1863, but little was known of its properties until recent years, its use being entirely confined to the microscopist, who employed it as a hardening and preserving agent. In its actions upon the tissues but few changes are observable, the tissues simply harden without material shrinking or discoloration.

In the specimens I herewith present, you will observe that the outlines in each are clear and strong, that there is no shrinking in any part, that each specimen is more firm and hard than found in its natural state, and that the natural colors are not affected by the agent.

If, then, formaldehyde possesses such marked properties as a preservative and hardening agent, in like manner must it be, according to theory, a germicidal agent as well, and experimentation testifies to the truth of the assumption. It has been found by experimentation that solutions as attenuated as 1 to 100,000 destroy quite readily the less resistant germs, while the more resistant ones are readily destroyed when immersed in a solution of 1 to 1,000. In this connection it should be observed that in solutions of the latter strength even, that the living human skin (example, the hands), is not appreciably affected by such solution, though the hands may remain in the liquid for a considerable time.

Although formaldehyde possesses such marked hardening properties it exerts no particular influence over mucus or albumen, save to render these substances aseptic or rather antiseptic, a condition that may be advantageous in its therapeutic uses. Of its specific action but little is known, save that it is, of most organic tissues, a most excellent hardening agent, and a germicide of the highest potency. Accepting, then, the theory that most of our diseases, especially the communicable ones, are the result of the action or growth of specific bacteria, and that the destruction of specific bacteria, in situ or elsewhere, stands for prophylaxis, alleviation or cure of such specific disease, and for which bacteria stands as the index, then the therapeutic use of formaldehyde, to me at least, is a suggestive one, and, clinically, in several directions I have experimented along this line with most favorable results, which results it is my purpose briefly to give.

The gas when liberated has the properties of diffusibility and penetrability in a marked degree, and therefore it is admirably adapted for disinfecting purposes, especially small rooms and exposed objects therein; but too great results must not be expected of it, for it will not permeate impermeable objects, and because of this failure it should not be condemned, though some writers have so condemned it. In passing, suffice it to say its penetrability, its effectiveness as a germicide, its comparative harmlessness upon objects with which it comes in contact, indicates it as worthy of an extended experimentation along therapeutic lines. Its use in this relation, as it has occurred in my practice will now be briefly given.

(*a*) Over four years ago Mr. C. sought advice for a diseased testicle, which I then believed to be malignant; its removal was advised and an operation performed with the use of mercuric bichloride as an antiseptic; recovery was much retarded by the formation of a fistula beginning near the upper border of the scrotum and passing upward along the tract of the cord; from this fistula there was constant discharge. This fistula was frequently cleansed with peroxide of hydrogen and followed with various other germicides, but without material improvement. A change in the method of treatment seemed desirable. I then placed upon a small probe a bit of cotton, which was just nicely moistened with water; immersing this cotton into full strength formaldehyde and removing the superfluous agent from the cotton by a couple of swings of the probe in the air; it was then inserted into and passed full length of the sinus, the smarting sensation was severe for a moment only. Suffice it to say, repair began at once and within one week there was full restoration of the parts affected.

About five months later the opposite testicle became similarly affected. For this operation formaldehyde was exclusively used in place of mercuric bichloride, and in the subsequent lavage and dressings the use of the agent was continued. Recovery was rapid without discharge or formation of a sinus. The patient is still living and healthful, with no indications of any malignant growth anywhere about the body.

For operative procedures in case of ruptured perineum, either recent or old, formaldehyde has been used as a cleansing agent with pleasing results; it coagulates the exudates, hardens the ruptured tissues with which it comes in contact, forming a barrier against septic infection from without, and as such hardening agent it proves to be a most excellent hemostatic as well. I have used it several times, more especially in cases immediately following confinement. Such wounds, rough and ragged as they might be, invariably repaired by first intention and without septic infection, a condition doubtless brought about by the peculiar action of this agent directly upon the lacerated tissues and exudates from such laceration.

(*b*) About three years ago Mr. D. complained of pain in and about the rectum. Examination revealed an anal fistula, blind external. The usual operation was performed and the wound curetted after which full strength formaldehyde was applied to the entire raw surface; the wound was well cleansed and partially closed in order to retain more fully the normal mechanical action of the sphincter ani. The external dressings were moistened with a weak solution of formaldehyde; restoration of the parts was rapid, reaching practically a perfect result.

(*c*) About three years ago Mr. V. requested treatment for bromidrosis; the case was a most severe one and various remedies had been tried, but without material benefit. A 10 per cent. solution of formaldehyde was prescribed, which checked sweating at once, and following this some ten days later there was exfoliation of the affected skin, leaving a healthful skin underneath. So far as known there has been no return of the affection.

(*d*) Various growths and pathological conditions of the skin have readily been destroyed by this agent, notably indolent ulcers, especially of the lip and face; molluscum contagiosum and allied affections by applications of formaldehyde have readily lost their vitality, then cleaving from the healthful skin, thus making their destruction complete.

Not alone in surgical work is the use of this agent indicated, but from a medical point of view, its peculiar properties suggest its use and in accordance with such suggestion it has been guardedly administered and its general actions noted as far as possible:

(*a*) Over four years ago Miss M., a dressmaker, began to complain of a gastric disturbance, the signs and symptoms of which were indicative of gastric ulcer. This condition existed in a varying degree of severity till about one year ago, when severe hemorrhage occurred, severe enough to threaten life. Ordinary remedies were administered and hemorrhage largely, but not entirely, controlled and there remained occasional attacks of vomiting, which showed degenerative changes within the stomach. Improvement was not satisfactory. Believing that this condition was induced by the development of some microörganisms, or the activity of some of the digestive ferments within the stomach, pure antiseptic treatment was decided upon and formaldehyde chosen as the agent.

Two minium doses were given every four hours well diluted. Immediately following its administration satisfactory and rapid improvement was noted, and the lady is now enjoying better health than she has enjoyed for years. The mode of administration, which was most satisfactory to the patient as well as to myself, was to dilute two minims of the agent in two drachms of water, swallow quickly this portion and follow it at once by half a glassful of water; the smarting sensation was then reduced to a minimum.

(*b*) About two months ago I was summoned to attend a case of dysenteric diarrhea in a child. The case was a very severe one from the onset; the child grew gradually worse until death was hourly expected; a change was then made from the usual remedies and formaldehyde was prescribed in one minim doses, mixed with egg-albumen; the disease in its active stage was soon arrested and his life prolonged, but the integrity of the intestinal tract was so altered that death occurred some ten days later, due to malnutrition.

A younger child in the same family was similarly affected and not till formaldehyde was prescribed, as in the case of the boy, were changes apparent; the child then made a rapid recovery.

Lastly, your attention is called to formaldehyde as a prophylactic agent. In the eruptive diseases, more especially so in scarlet fever—on account of the hardening and germicidal properties of this agent—is its value most apparent.

We are all aware how hard it is to enforce strict quarantine over a patient during the entire period of desquamation; we are also aware how difficult it is to determine when no danger exists, when no specific microörganisms can be conveyed from the convalescent to the uninffected. Experimentation has proven, to my satisfaction at least, that when it is applied externally, in scarlatinal cases, beginning with the eruptive stage, and carried well into the desquamative stage, the latter stage is materially shortened, while the vitality of these microörganisms is destroyed within the nidus, the scale, a considerable period of time before desquamation is completed; this conclusion is based upon experience, an experience that warrants the opinion that as such prophylactic agent, it stands without a peer.

It matters not, if the germ be dead, where the scale may go, it can do no harm, it can produce no life, its power of reproduction is destroyed; reinfection must come from a new source.

Its use, as a medicinal agent, is only advocated where germicidal medication is called for and indicated; not that it will cure (?) all diseases all of the time, but rather that it may affect, in a desirable way, some of the specific diseases a part of the time.

22 EAST MILLER STREET.

SENILITY, SENILE DEMENTIA AND THEIR MEDICO-LEGAL ASPECTS[1].

By F. H. STEPHENSON, M. D., Syracuse, N.Y.,
Neurologist to Syracuse Hospital for Women and Children.

WHEN using the term senile or senility we refer to advanced age, but from a medical standpoint the number of years a man has lived has often little bearing, anatomically and physiologically, for many from forty-five to sixty years of age show the symptoms of degeneration or presenility, which changes should normally occur about the seventh decade of life, when general involution of the whole body begins with loss of functional activity of the brain.

How true, pathologically, is the saying "man is as old as his arteries," and how frequent the symptoms of degeneration following these circulatory diseases. Forgetfulness and insomnia are often marked in mankind after fifty years of age, regardless of other mental infirmities. Physical symptoms of senility usually precede mental changes and consist of general decrepitude, tremor of the hands, facial muscles and tongue, and the stigmata of focal brain disturbances, such as aphasias or monoplegias. These may be temporary, due to circulatory disturbances, or permanent, when due to aneurisms, embolisms or hemorrhages.

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[1] Read before the Syracuse Academy of Medicine, December, 1900.

Case I.—Mrs. M., aged 76 years; presents quite a typical history. She complains of intense vertigo, distress in the back of her head, ringing in her ears, insomnia, paraesthesia and hyperesthesia, sparks, lines and flashes of red and yellow light before the eyes; there are vaso-motor symptoms, such as hot flashes and drenching perspiration. Quite recently there have been observed progressive mental enfeeblement, sensitiveness, confusion, impatience.

These patients show an inability to recall dates, are subject to vacillation, become easily disturbed, yield readily to the entreaties of their children or friends, make foolish marriages and unjust wills. They transfer their property unwisely; their memory for recent events is very unstable, they forget the events of yesterday, but give most accurate and interesting data of their earlier lives, the development of the country, its prominent men, their sayings; yet while relating these matters they forget who you are, your errand, and cannot tell the day of the week, or the month of the year. Their physical comforts often are all they care for, they forget family and friends, and call their children by other than their own names. Memory and judgment associations have failed, and sad to relate, they commit many breaches of decorum. Though living in fine homes they imagine poverty is staring them in the face, and they almost starve themselves, and sometimes reek in filth; they develop delusions of persecutions, grow melancholy or excited, wander about at night and keep an entire family or institution in an uproar. With these more marked changes from the normal the patient has developed a complete picture of insanity, with all of its moods and fancies, the usual form, history and development being that of senile dementia, its features and delusions being characteristic.

Senile insanities may manifest themselves in manias, melancholias, incoherent paranoias and dementia, all modified by weakened cortical function with special delusions, but particularly those of coming poverty or want.

These demented old people are often very troublesome and have to be committed to hospitals for the insane. The regularity and restraint of an institution often acts beneficially and they spend their days in greater comfort, though many realise their confinement, and considering it unjust, they make a great disturbance for all about them and seem the most trying of all lunatics.

ETIOLOGY.

Heredity.—Mental strain, physical illnesses, arterio-sclerosis, focal degeneration, trophic changes, cerebral hemorrhage, general marasmus of nervous tissue, enfeeblement due to age, causing an organic psychosis, all appear to be the conditions developing this state of mind.

Diagnosis.—General enfeeblement, defective memory and judgment, loss of ethical feeling, a changed *ego*, lessened sympathies, slow perception and thought, arcus senilis, hardened radials and tortuous temporals, are evidences of mental and physical decay or degeneration.

Prognosis. —Remissions in some symptoms occur in these cases, but those well advanced in years with marked dementia never recover. They may have capacity for receiving impressions, but they cannot formulate ideas. Should no intercurrent disease occur to cause death, they drift on from bad to worse, developing bed sores, diarrhea, cystitis, colliquative sweats and finally death.

Pathology.—We find the brain diminished in weight in many cases, distension of the ventricles and vessels, signs of atheroma, pachymeningitis hemorrhagica, degeneration of ganglion cells and fibers, encepholamacia, sclerotic hardening and hemorrhages. An increase of hemoglobin and leucocytes often occur.

The lines of sanity and insanity are very closely drawn, yet they vary with different alienists and psychologists. Many men only regard as insane any act which is positively wrong; other deviations they call eccentricities. Many alienists claim a man insane who is lacking in memory, judgment, the power of concentration and will. One must weigh these standards of opinion carefully, for while the former draws his fine lines of diagnosis and acts by them, circumstances may present themselves whereby another may be as accurate and have weighed all of the physical and mental symptoms, yet have his lines of diagnosis drawn at a different standard. Many men have mental ability and are truly geniuses, but lack in mental stability and earlier or later lose balance and go over the so-called normal line of sanity. As physicians we have to deal with the testamentary capacity and the sequestrations of the persons and property of these old people.

The family physician, who has been in attendance for years should recognise the changed *ego*, manner, custom, habits, and thus form an opinion of a person's sanity. Reports given us must be weighed carefully. At first they may appear delusions, when on further investigation we find them true occurrences, also regarding their care and the management of property, and whether the one who applies for a commission to be appointed is interested financially, or is it a matter solely of philanthropy?

Some attorneys claim we examine these patients or testify on the witness stand, after having heard the hypothetical questions, with preconceived opinions. This cannot be helped, as we must have the previous history before arriving at a conclusion. Experts know too well the unreliability alone of a personal examination. It is the past life and the many factors put together which make the diagnosis even without delusions. It must be remembered they often extend beyond the form in which they manifest themselves, and may influence the mind in important matters. We think with Blanford, who said: "It is always satisfactory to find delusions for they indicate a stage of insanity when perverted feelings and emotions have taken the shape and form of insane ideas and conceptions."

Lord Brougham, quoted by Hamilton, in Nervous and Mental Jurisprudence, said: "A mind which labors under a certain delusion, though apparently sane on all other points is not so—it is only sound in appearance."

A medical man well experienced should be able to recognise a deranged mind, and to know if such a state of derangement is sufficient to account for one's actions. Look to the grade of his mental power, to the notion by which he is controlled, to his views of matters in general, tot he past course of his life, and as Ordroneaux said, "look to his power of control over his doings or actions, whether this power is regulated or running at random.

We must remember insanities, like most of the neuroses, are characterised by exacerbations and remissions, thus explaining the great variance in the patient's ideas and movements.

Case II.—Comprises a will executed by a childless widow, 68 years of age, disposing of over $30,000. Her first bequest was to the son of her former coachman, not at all related to, nor having any claim upon her. The second, to an agent who had been well paid monthly for his labors and the third to a former partner of her late husband, who had for some years kept them both in a state of unrest and fear; while her near relatives, in whom she had always been interested, and who had frequently been told her property would descend to them, received absolutely nothing. Imagine the person making this will having lived in excellent style, having servants, horses, carriages and other luxuries, beside having a fine social position, changing to such an extent that she disposed of all luxuries and nearly all necesities, attending to all of her household duties, having very meager meals because she could afford but little food, sitting in a cold room, as she could not afford a fire, dressing poorly and untidily, having increasing deafness, with attendant suspicion, in fact exhibiting a changed manner of life and *ego*.

Could such a person make a just will which would be according to her intention when in normal health? The affirmative would say, "she might have received such treatment from relatives as would cause her to change her plans, or, her new friends she may have considered more worthy, and more needy. Again, the affirmative might say her income was so much less than in earlier life that her later income seemed paltry in comparison, and this accounts for her changed manner of living. Elderly people usually grow penurious and have less expensive habits than in earlier life, but from the history given, marked signs of physical decay, with palor, tremor, increasing deafness, suspicions, feebleness, ideas of poverty and fear, I believe our picture to be one of senile dementia, and that a will executed by such a person would doubtless be unjust.

Case III.—A man, aged 80 years, presented a picture of senile infirmity. He forgot the name and number of his children, as well as the towns in which they lived. He had no memory of later or recent events, became confused regarding the late Civil War and the recent Spanish Wars. One child has managed to have certain bank deposits transferred to her account, while other of his children, who are far more needy,and the ones on whom he depends for daily care, could not prevent this injustice.

We certainly can not expect such a person to make a just disposition of his estate, yet such persons are constantly defended by our best attorneys in surrogate and other courts of justice. Occassionally, we meet cases where some special delusion is the marked feature, other usual indications of dementia not being well marked. In such cases a will might be accepted, provided the delusion was not of such a character as to influence the executor of the will at all regarding his pecuniary affairs. This is a changed idea from that which was accepted years ago. It is an American and English law, but not accepted by all alienists, who claim man has one and the same mind for all actions dependent upon reason and judgment, and if he cannot reason the delusion away his judgment is impaired and therefore he is unfit to transact business.

The laws of science cannot always decide the care of these senile dements; facts and common sense must decide very often their needs, and the natural care of their person and properties.

PAIN in the lower limbs, or the slightest degree of limping in children, should lead to an examination of the hip-joints. Many cases of beginning hip-joint disease may be discovered at a time most opportune for treatment.—*Interstate Medical Journal.*

SOME MISTAKEN IMPRESSIONS REGARDING TROUBLES OF THE GENITO-URINARY ORGANS.[1]

By J. HENRY DOWD, M. D., Buffalo, N. Y.

IT IS only during recent years that much attention has been given to inflammatory diseases of the genito-urinary organs, and especially when the same has been caused by venereal infection.

For this reason many medical men, I might say the great majority, are working on theories at least one hundred years old and these having been carried down by medical writers until say from five to eight years ago. It must be surmised from the above statement, that graduates previous to that time are now working under these old theories, unless they are, giving or have given most careful consideration to diseases of these organs since their college lectures. Even books of today are slightly hazy on certain conditions involving the genital and urinary organs. For instance, in the latest publication the opacity of urine in chronic urethral trouble is spoken of as being due to mucus and a slight amount of pus, when in reality there is very little of the former, the turbidity in nearly, if not every case being due to pus; the same being positively demonstratable if the microscope has been used. Many of these fallacious opinions have been so ground, into the laity, that it is a common occurrence to hear a patient say that he had an inflammation of the bladder with his gonorrhea, where by careful questioning the fact is brought out that he was suffering only from an involvement of the posterior urethra. The diagnostician in every case was a doctor, one who has been taught that frequency of urination, with pus in the second glass, meant cystitis.

Cystitis Complicating Gonorrhea.—Although every case of acute gonorrhea in the male is accompanied by frequency of urination, still involvement of the bladder during this disease is of the rarest occurrence. To understand this thoroughly one should be intimately acquainted with the physiology of urination. In perfect health and under normal conditions, urine enters the bladder at the average rate of about two ounces every hour. When the viscus becomes filled to an extent sufficient to overcome the resistance of the internal sphincter, this muscle relaxes, allowing the fluid to trickle into the posterior urethra, which at this time becomes a part of the urinary bladder, the neck. If there is inflammation in this portion of the canal and it is acute, as soon as the first drop of urine strikes the inflamed membrane, there is immediate desire to urinate, and but little, if any pus will be found in the second glass, for the reason that time did not permit of the pent up product of inflammation to gravitate backward and mix with the urine in the bladder.

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[1] Read before the Physicians' Club, September 12, 1900, and at the thirty-third annual meeting of the Medical Association of Central New York, held at Rochester, N. Y., October 16, 1900.

On the other hand, supposing the membrane has been in a state of inflammation sufficiently long to withstand a certain amount of irritation, as soon as the internal sphincter gives away the urine enters, but the desire to urinate does not take place, rather the pus and other débris, intermingles with the incoming fluid, is carried into the bladder by the constant agitation which is going on, and when the desire is felt, if the urine is caught in ten divided parts, each and every one will contain pus, yet no involvement of the bladder is present.

As there is no doubt that the posterior urethra is involved in every case of gonorrhea, it must be very evident to all that the germs find their way, sooner or later into the bladder. Various theories have been advanced as to the cause of gonorrheal cystitis, but I shall only offer an explanation as to why this viscus is so rarely affected. Although the epithelium lining the bladder appears similar to that of others parts of the anatomy, it seems to have a resisting power that is found in only one other structure, the vagina. Above the bladder is found two organs of the utmost importance to life, and it seems that nature has taken into consideration the frequency of urethral inflammation and has placed this barrier, the bladder, between this canal and the aforementioned organs. The female bladder also withstands the attack of inflammation well, yet it is more prone to inflammation than that of the male. It can be briefly stated that cystitis is rarely an accompaniment of acute, or even chronic gonorrhea, when there is no other complicating factor present.

Vaginitis.— In the female it is known that there exists a direct route from the outside world to the peritoneal cavity and it seems that nature has interposed a fortress between for the protection of that delicate portion of her anatomy. We find this tube, the vagina, to be lined with epithelium which seems to have a resisting power against germ invasion and at the same time, and in contradistinction to the bladder of the male, the habitat of germs which, of no serious consequence to their possessor, has the power of destroying any foreign germ that may seek an entrance.

It may be inferred that the question will be asked, "how can pelvic peritonitis be accounted for, or, if infection does take place at the cervix, do not the germs gravitate downward in the secretions and in this way infect the vagina?" Suffice it to say, the resisting epithelium, together with the bacteria inhabiting the part, offer an obstruction so great, that even the gonococci in their most virulent form, except in extreme conditions of general systemic debility, fail to find a foothold in this portion of the human anatomy. Excluding traumatism, in the adult inflammation of the vagina is very, very rare. From careful examinations the writer has seen but two cases in five years; both were due to gonorrhea and both were syphilitics.

Albumin and casts as indicative of nephritis.—The old idea that when urine is boiled, becomes turbid, and this turbidity is not cleared away by the addition of nitric acid, that albumin is present, and that this is an indication of nephritis, is an exploded theory. It is not an uncommon thing to find the urine loaded with albumin during an attack of urethral inflammation where the most careful examination shows positively that no kidney lesion exists. It should be remembered that whenever serum exudes from the bloodvessels, albumin will be found in the urine, and the leaking of this substance (serum) is quite frequently found during an attack of gonorrhea or other inflammation involving the urethra or the bladder. Wherever there is a great amount of pus, the finest tests will always show a slight amount of albumin, but the kidneys must not be accused of producing the same, unless these organs are positively known to be involved. Albumin in discoverable quantities is not a constant accompaniment of Bright's disease; on the other hand, it is seldom found in the chronic forms, such as the interstitial. The finding of casts has generally been thought to be a most positive indication of nephritis, but such is not the fact in all cases. It is the most common occurrence to find a hyaline cast, especially if the centrifugal machine is used, and even epithelial casts are occasionally seen. If one will take the trouble to examine his urine carefully after a meal, rich in substances known to cause kidney irritation, also the free use of alcohol, many casts will be seen, hyaline, epithelial, and even granular; still, the kidneys are only suffering from a circulatory change. Of course, it must be inferred that the epithelium on the casts is in a healthy condition, for if it shows degeneration, it is indicative of a lesion.

Syphilis.—Many important points regarding this disease are open to doubt in the minds of not only the profession, but the laity. Syphilis must be included under the curable maladies, excepting where it assumes a malignancy from the outset, or is allowed to reach the tertiary stage. No attempt must be made to destroy a syphilitic chancre, as it very rarely accomplishes anything; but, on the other hand, causes a destruction of tissue which leaves a permanent scar. Tertiary symptoms may develop at any time, even as early as the sixth week after infection. The hot springs of Arkansas have no curative powers, they are only of benefit in cases of great debility, where the water acts as a tonic to the system. A positive prognosis must never be given in case of chancroid; there may be mixed infection.

Stricture.—Twisting or screw-like formation of the urine as it merges from the meatus is in no way indicative of urethral stricture. Herpes, in at least 95 per cent. of all cases are nature's warning that trouble exists in the canal, and this trouble is generally stricture. A sound will not diagnosticate a stricture and locate it, unless it is a very small one and a large instrument is used. Where chronic urethral inflammation complicates a stricture, never attempt dilatation until the urine, by its clearness, shows that the general inflammation has almost, if not entirely subsided. The urethra when to be operated upon, or manipulated, needs the same antiseptic precautions that any other part of the anatomy would receive. Internal medication is of little or no value in acute, and except in a very limited number of cases, is of no value whatever in chronic inflammation of the urinary tract, especially below the kidneys.

Syphilis vs. gonorrhea.—The common opinions held by the laity, that gonorrhea is no worse than a bad cold, and syphilis is never curable, and is transmitted to their children's children, is fast losing ground, and well it should. The statement can be made without much fear of contradiction, that of the two diseases syphilis is much the preferable, if we must choose between them. It is rare that death or even much deformity can be traced to syphilis, provided the disease is treated according to the methods in vogue today: whereas on the other hand, no one can foretell the ultimate result which may follow an infection from the gonococci. It is a very broad statement, but could gonorrhea be eliminated from the category of diseases affecting humanity, fully 1c per cent. of the suffering that the human being is subjected to would be a thing of the past. It should be remembered that gonorrhea kills more people than syphilis, although the latter takes years of protracted treatment for a cure.

288 FRANKLIN STREET.

EMPYEMA WITH RECOVERY IN A BOY TWO-AND-A-HALF YEARS.[1]

By M. L. BENNETT, M. D., Watkins, N. Y.

EMPYEMA, or an accumulation of pus in the pleural cavity, is quite a rare disease and is more likely to occur as an inflammatory complication of pneumonia or pleuro-pneumonia, and more often in the child than in the adult. The first symptoms are a sudden rise in temperature, with a distressing cough, great dyspnea, with severe pain. restlessness, the skin bathed in a clammy perspiration, a rapid pulse, the temperature ranging from 102° to 104°; respiration. 40 to 50. There is dulness on the affected side with change of sound on auscultation or percussion when sitting or lying, or if the patient is turned on his side. As the hours pass the affected side becomes more fixed, the intercostal spaces are even, sometimes bulging, the respiratory murmur is *nil*, and the dulness is complete when the chest fills with pus. There is great exhaustion and emaciation from the beginning, with loss of appetite and sleep.

The diagnosis of empyema is not always easy in the early stages, when the pus is in small quantity, and it may be hard to differentiate from some forms of lung trouble, except for the variety of sounds one hears in most all the early stages of pneumonia upon auscultation and percussion, and in empyema the dulness being more complete.

The prognosis of this disease in young children is not very favorable, therefore it should not be left long to itself, and the sooner the pus is removed the better will be the chances of recovery. The danger to life is chiefly due to the complications,—pericarditis, septicemia and rupture into the lung or bronchi,—but besides these complications the most serious is the deformity that occurs in the chest and spine following the collapsing lung.

Now, as to treatment of empyema. In my opinion we can expect but little from medicine in curing our patient. To be sure, it is wise to look well to everything that will in any way add to his comfort and welfare. The alterative doses of mercury act well, also the hypophosphites with a concentrated diet, but you will find that your sheet anchor is in getting rid of the pus early, either by aspiration or incision and the introduction of the drainage-tube. In most cases aspiration should be limited to one or two trials and if that fails, then free incision and drainage. The best point selected for puncture, is the posterior axillary line at the extreme angle of the scapula, between the 6th, 7th or 8th ribs, selecting the most pendant portion of pus.

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[1] Read at the thirty-third annual meeting of the Medical Association of Central New York, held at Rochester, N. Y., October 16, 1900.

The method of simple incision, large enough to allow the insertion of the drainage-tube, may prove all that is necessary and is much safer in children than resection of a rib, because the shock is no more than that received from aspirating. This should be followed by irrigation after draining of the pus, either with dioxide or bichloride and then washing out with normal salt. This solution should be warm, leaving some of the normal salt in the cavity.

I will report a case to illustrate:

Walter D., a little boy, two-and-a-half years of age, of healthy family history, was suddenly taken ill with lobar pneumonia of the left side on February 15th of this year. The inflammation commenced in the upper lobe and in a few hours implicated the whole lung. At this time the temperature was 103°; pulse, 150, and respiration 40. The little patient was nervous, so that it was impossible to use cold external applications, and hot poultices were used instead and a syrup of the muriate of ammonia, in teaspoonful doses, was given every two hours; also, we gave a tablet containing calomel, ipecac and soda, as a laxative Under this treatment, the disease ran nearly the usual course, with the temperature ranging from 102° to 104°. On the tenth day the temperature fell to 101° and on the evening of the eleventh day it dropped to the normal, with a corresponding reduction in pulse and respiration. In three days after this, the temperature began to rise, reaching a 102°, the respiration 40, with a harrassing cough; the child restless and considerable pain. All these symptoms I regarded as very suspicious; frequent examinations of the chest were made and in a few days they revealed the fact that we had an effusion in the pleural cavity. Here there was the problem of dealing with a pleurisy or empyema, as a secondary complication of the pneumonia, which, in my opinion, is always secondary and rapid in its occurrence. On the 10th of March, about ten days after, there was found positive evidence of effusion into the pleura. We aspirated, removing about twenty-two ounces of pus; following this there was marked relief in the respirations, and the temperature went down to 101°, and remained at nearly that point about a week. Then we could see that the chest was beginning to refill and continued until it was full. This could be detected from the dulness on percussion and auscultation, also from the slight bulging of the intercostal spaces and the pronounced dyspnea and increasing temperature. So, on April 1st, we again aspirated, removing about the same amount of smooth creamy pus that we removed at the first aspiration. There was the same marked relief to the little patient in the dyspnea, temperature and pulse; the cough got better and the appetite improved, but with all these improvements, there was extreme exhaustion. The little fellow became very much emaciated and the temperature after this vacillated between 100° and 101°; however, he rested better. This state of things continued until May 1st, when we decided to open the chest and put in a drainage-tube, remove the pus and wash out the pleura.

You are aware that it is claimed by some surgeons that cases of empyema will get well by repeated aspirating alone, holding that it is not necessary to institute free drainage. While this may be true, I am doubtful if we are warranted in assuming the risk of contraction of the lung, incident to the accumulation of pus which is likely to be present when such a course is adopted. In this particular case, the accumulation of pus was rapid and, in my opinion, good drainage is the principal thing, as was proved to me in the further care of this case. So, after getting the skin over the point of puncture under the anesthetic effects of cocaine, I opened the chest at the posterior axillary line, between the 8th and 9th ribs, this being selected as the most pendant point for the pus, a No. 8 soft rubber catheter was introduced. After draining off 16 or 18 ozs. of pus, the pleural cavity was washed out with a 25 per cent. solution of peroxide, and this was followed by the introduction of the normal salt solution, leaving a portion in the chest. The tube was left in the chest and the end covered with gauze and cotton, these dressings being removed two or three times a day, or as often as soiled. In a few hours we found that the little patient's temperature was reduced to 99°, the respiration improved, the appetite gradually grew better, and he could sleep through most of the night. In fact, the little patient seemed more comfortable in all respects. The discharge continued to grow less and the collapsed lung began to fill the chest.

The movements were also improved, but as the discharge continued to some extent, we concluded to again wash out the chest, which was done on May 15th. This time mercury bichloride solution, 1 to 4,000 was used, afterward washing out with the normal salt. After this washing the discharges were less frequent and continued to diminish day by day until the middle of June, when they ceased entirely. From this time there has been daily improvement in everything pertaining to the case. The little fellow, who before this illness used to romp and play with the children, had by his severe sickness been reduced to a mere skeleton and was unable to creep or walk; very soon afterward, however, his chest grew better, his strength improved, he soon began to creep, then to walk and play with the children.

The expansion of the lung is fairly good with a little loss of motion below the fifth rib, but he does not seem to favor this side in walking at all. The history of this case is interesting to me, both from the fact that the child was so young and also the length of time from which we commenced the drainage to the time of our removing the tube. One advantage in this method of drainage is that it allows considerable freedom to your patients. They can change their position, and may be removed from the room to another in order to procure pure air.

One of the chief necessities in the management of these cases, is to get the patients in such condition that they can be allowed to get fresh air, for the sooner they can get out the better. Medicinally, this child has taken nothing since recovering from the pneumonia, with the exception of syrup of the hypophosphites and syrup of the iodide of iron. At this writing he is gaining about a pound a week.

This case illustrates fairly, the results of surgical treatment in empyema in a young child, and physicians can readily appreciate that it is much more difficult to care for so young a child than for the adult. In my opinion, the results obtained in this instance were even better than had we performed a resection, as there is no more shock to the patient than by ordinary aspiration. The drainage-tube can be taken out and kept out over night and then returned. This we did several times during the treatment of this child.

Routine treatment in this class of cases is unscientific, as in every other department of medicine, therefore, we must adopt our treatment to the exigencies present in each case. I believe it to be bad judgment to subject every case of empyema to rib section, as it is to disclaim that the necessity of resection ever arises.

DISCUSSION.

Dr. G. P. Clark, Onondaga—The author said the diagnosis he made was of the fact that he had empyema, and I believe he said that the respirations were *nil.* That, of course, is true in the majority of cases. There is a class of cases, and one often meets with them—at least, I have, a great many times—in which the sounds resemble very closely those of pneumonia, especially in the fact that instead of the respiratory sounds being *nil*, you have very pronounced bronchial breathing. I might say that, to me, the difference between the lobar pneumonia and these cases is that the sound is startling, close to the ear. It seems almost as though it was right under the skin. I have had a chance of proving the diagnosis, I am sorry to say, in a number of cases, by autopsy, and I think it is very well established, that in a good many cases of empyema, you have bronchial breathing instead of an absence of the respiratory sounds.

Dr. Cheesman, of Auburn, once told me that he had met with the condition in grown people upon more than one occasion. I have never seen it except in children, but it is very marked, and it is something that should be kept in mind in diagnosticating those cases. Perhaps it would be well to state that in most of the cases of that kind where I have seen the autopsy, the discharge in the pleural cavity has been very thick indeed, and possibly that accounts to some extent for the bronchial breathing; but if you once hear it, you can never mistake it.

Dr. F. W. LESTER, Seneca.—May I be allowed to ask Dr. BENNETT how many weeks he poulticed that child's side before operation?

Dr. BENNETT.—Only a week or ten days.

Dr. LESTER.—Two cases come to my mind of being called in counsel where there was pus in the pleural cavity. They had been poulticed for a long time. One had been poulticed over six weeks. When I opened the thorax, I drew over three quarts of pus, and there was still another abscess which depressed the heart, and shoved it over to the right side. The one that I opened first was on the left side. I opened it again directly over the heart and drew over a pint from that side. This child's chest, child about eleven years old, had been, as I said, poulticed a long time.

The second case I was called to by this same physician. My incision into the thorax was about an inch and a half long and the pus spurted fully six feet. The stream was larger than my finger and went clear against the wall. In that case, there was curvature of the spine from adhesions following it and great deformity of the body. Of course, this serum that is first diffused into the pleural cavity turns to pus, and by poulticing, the pus increases. I would not dare to say how much was in that second child, aged fourteen, that had this deformity. He lived about six years afterward and took pneumonia on the other side and died. I believe two gallons of pus came out of that child's side. I merely bring to your attention this matter of poulticing. It is well enough to put on a poultice for a few days, but if you continue, you will have trouble.

Dr. R. S. CARR, Wayne.—Speaking of the large quantity of pus, a case comes to my mind, that I thought I would mention at this time. I was called in consultation to see a case of lobar pneumonia in an adjoining village, and it was pure and simple lobar pneumonia. I was called about three weeks later to see the case again and operated as the author has suggested. I brought an ordinary milkpan as a receptacle for the pus and the milkpan was nearly filled. There were, at least, four and a half or five quarts of pus. There had been no poulticing in that case, simply the pneumonia jacket, that we are all prone to use at this time. So that it is possible for the pus to occur in those large quantities without the use of the poultice.

Dr. LESTER.—The jacket acts as a poultice.

Dr. CARR.—We continue to use the jacket, however; I simply wanted to call attention to that.

Dr. H. B. Hawley, Onondaga.—It seems to me the remarks of the two last speakers supplement what was said by Dr. Clark somewhat. The fact that the bronchial breathing so closely resembles pneumonia, leads us to conflict the two. I don't believe that the poulticing or the jacket does any harm! that is, causes the pus to accumulate more rapidly. It is the neglect that does it. You needn't be fooled. A little hypodermic syringe used as an aspirator will, nine times out of ten, clear up those obscure cases. You need not wait six weeks when six hours or six minutes will show you, if you will use your needle, and you are not losing the valuable time that runs your patients down. It is the diagnosis that is at fault.

Dr. N. Jacobson, Onondaga.—It seems to me this question of empyema is one that must be rewritten altogether. I believe there are a great variety of cases. We have cases of empyema that are due to pneumococcus, some due to pleurococcus and some to the epidermic bacillus, and the course pursued in the different cases depends upon the character of the germs that provoke it. In the cases that are due to pneumococcus, where we have pneumonia infection, it is very possible you may have pneumonia in that class of cases, and you may confound the symptoms, because you have the symptoms of both coexisting. Therefore, it does not follow that your diagnosis of the existence of pus in the pleura is to exclude the diagnosis of a coexisting pneumonia. That class of cases, it has been proven by experience, as far as we have gotten, will do well by aspiration, if any case would at all. Many cases of the pneumococcus empyema clear up after a single aspiration, but I don't say that with the idea of advising aspiration for cases of empyema.

On the other hand, the other forms of germ infection, of which I have spoken, do not clear up after aspiration, and those cases require incision. I do believe this condition of things is more often overlooked than recognised, for I see cases that have gone on for months, often for weeks, and being called on to operate frequently, I have seen these cases that go on to a deformity of the chest, where it requires further procedure to dispose of the trouble that has been produced. I have operated as early as the eight month—one child with empyema, at that age—and I have operated late in life. I have one case in mind, in an adult, where the effusion was allowed to collect until the lower part of the diaphragm rested on a level with the crest of the ilium. There is no excuse, as one speaker has said, for delaying the diagnosis, because your aspirator syringe will tell you; and I believe, as soon as you have pus, you had better evacuate it. It is a question, of course, as to the choice of methods; but a little care, care not to turn the child on the other side and press the heart, and careful incision, makes the operation a very simple one.

As far as poulticing is concerned, I must confess that I have not used a poultice for any purpose whatsoever in years. I think a poultice is a thing we ought to discard for any and every purpose whatsoever; not only for pneumonia, but for everything. I feel that while it may not have anything at all to do with the collection, it is one of the things there is no occasion to use.

Dr. R. C. McLennan, Onondaga—It is a matter of not very large practical application, a matter of scientific interest, but the *x*-rays show these effusions in the chest cavity very clearly; and in a case where one can get an *x*-ray machine, this matter of effusion can be demonstrated very conclusively.

THE SURGICAL DIAGNOSIS OF RIGHT-SIDE ABDOMINAL DISEASES.[1]

By A. L. BEAHAN, M. D., Canandaigua, N. Y.

A GROUP of recent cases of the right abdominal region calls attention to the interesting features of diagnosis of diseases common to that locality. This section presents more varied and common diseases than any other of the body. In its topography are included the right lobe of liver, the gall-bladder, duodenum, pancreas, hepatic flexures of the colon, right kidney and its suprarenal capsule, cecum and ascending colon, coils of small intestines, appendix and right ureter, and it is bounded posteriorly in part by the right psoas muscle, an important fact.

The most important organs, because of frequency of involvement in disease, are the appendix and gall-bladder in the male, tube and ovary in the female, while the kidney of this corresponding right side, is very often surgically diseased. A specific and differential diagnosis is demanded, beginning with one of the more frequent diseased organs, the gall-bladder.

Acute inflammation of the gall bladder manifests itself somewhat suddenly, with pain on right side of the abdomen, rapidly becoming general. A rapid and feeble pulse, quick thoracic breathing, fever, intense depression, marked tenderness on pressure, especially over the right side of the abdomen, rapidly developing tympanitis, persistent vomiting and an extremely anxious expression of countenance, are usually present. The acute peritonitis, localised at first, becomes general.

In all gall-bladder inflammations there is a tender spot, it may be called the "Mayo Robinson point," at the juncture of the outer one-third with the inner two-thirds of a line passing from the umbilicus to the ninth rib, at the notch found in the line of the costal margin.

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[1] Read at the meeting of the Society of Physicians, Canandaigua, N. Y., February 7, 1901.

For the appendix, let the same imaginary line pass from the umbilicus to the anterior superior spine of the ilium, and at the juncture of the outer third with the inner two-thirds of this line, will be found the "McBurney point." In the female it is somewhat lower.

Neither of these points are the points of tenderness in cholecystitis and appendicitis exclusively, but they serve to fix the mind on two important points in a clear manner.

The right kidney projects one-half of its size below the costal border of the right lower rib. When the kidney is enlarged from disease or a perinephritic abscess, it projects forward as a more or less smooth mass, between a possible abscess of gall-bladder or appendix. It is never movable if a perinephritic abscess binds with adhesions posteriorly.

The right ovary and tube can be recognised by conjoined vaginal and abdominal palpation, when proper care is exercised. The diagnosis of disease of tube and ovary should be possible to every practitioner of medicine and surgery, as well as to the gynecologist, to the end that uterine tinkering in ovarian disease may not be practised, as any latent ovarian disease is easily excited or increased and the uterine mucosa is of itself but little influenced by ordinary local treatment, such as cleaning and applications.

Gall-bladder troubles of common character are from calculi in its cavity, its cystic duct, or in the common, or hepatic ducts. If calculi are in either the hepatic or common duct, jaundice occurs; if in the cystic duct jaundice is not present. An enlarged gall-bladder may result from calculi, hydrops of the organ, empyema of the gall-bladder, or from a tumor essential to itself. A floating kidney often simulates gall-bladder disease, but the kidney can be pressed back into its original place, while the gall-bladder is less freely moved.

I have seen one gall-bladder filled with calculi that could be depressed below the umbilicus, making differential diagnosis uncertain, as jaundice had not occurred, because the calculi were of small size and could pass readily through the cystic and common ducts. But the appendix most taxes diagnostic skill. No symptoms are certain or peculiar to its manifestations of disease. No means of diagnosis are comfortably safe. The masters of the appendix art cannot impart exact rules. Leading symptoms are important, if present; equally important, if absent.

A recent case in a nurse we had watched a year, having a year previously treated her for rectal fissure. Only two symptoms at first were pointers,—one, menstrual pains growing worse, another constipation. You may say these are common to women. The patient at the menstrual epoch had a chill and belly pains, not so severe as to prevent caring for her patient night and day at the Natural Science Camp, Canandaigua Lake. After this no symptoms followed, except slight backache, malaise and vomiting, if cathartics were employed to relieve her constipation. The succeeding menstruation gave epigastric, followed by right inguinal, pain; then a cold spell, but not a distinct chill, followed by a temperature not above 101 1-5°, but never quite normal.

We often found 99 1·5° to be the appendical mean temperature. The pulse was never above 80. The menstrual pain, as presumed by patient, was a trifle more severe than that at the last time, and was ascribed to the fact that at the camp during the previous menstruation she might have taken cold. To increasing menstrual pains and constipation we could add but little history, not more than many women suffer, and if not in the hospital, I question if this attack would have been properly catalogued.

The bowels were freely moved, and palpation discovered a swollen and tender appendix. Operation was consented to and an appendix found swollen, with a phlegmon of meso-appendix of considerable size, so dark grey in color and so nearly boggy in feel, that the fear of its breaking down led to suturing it to the line of incision, so that if abscess developed it would be within easy reach; and for forty-eight hours our mind did not rest easy because of danger of sepsis. Two grape seeds were found in the appendix; one had much surrounding ulceration, feeding the phlegmon in meso-appendix with sepsis.

Two recent cases of appendicitis illustrate another puzzle in diagnosis. Both had attacks of peritonitis, one six weeks and the other twelve weeks previously. In either case the appendix was not to be palpated until the bowels were freely purged, and this was because in each case the appendix was posterior to the cecum, being sharply flexed on the cecum. The distension of the cecum prevented palpation of the appendix. The appendix may also be so badly disorganised as to be undiscoverable. The relation of menstrual irregularities and appendicitis seems to us to be intimate and to bear further research.

Usually the swollen appendix can be felt. With the patient in the dorsal position, legs well flexed, fingers of left hand applied to back of fingers of right hand, that the pressure may come from the left, and that with the right, so accustomed to sensitive touch, pressure may be made carefully and steadily against the psoas muscle during respiration. If the rectus comes up the hard pressure must be under and at the side of the muscle. A hard right rectus means appendicitis. If it continues after the patient is otherwise relaxed under an anesthetic, it means that pus is present. Painful micturition means that the appendix lies pointing toward the bladder. Pain in the back means a backward and upward pointing of appendix.

Most groin abscesses are from the appendix. Dr. Joseph Price recently asked the internes of several Philadelphia hospitals how many psoas abscesses they had seen in their terms of service. All answered none.

Perinephritic abscess pushes the kidney forward and in a recent case the diagnosis was made correctly, as proven by operation. The kidney was well forward and, though much enlarged by the inflammatory process, continued to give its smooth normal contour. The incision for abscess was made posteriorly. If made over prominence of swelling, to reach the abscess would require incision through the kidney, or a nephrectomy, a mistake recently observed, the kidney being needlessly sacrificed. In no other locality is a refinement in diagnostic acumen and ability more necessary. In no other does a similar gratification occur. The touch aids the judgment, the mind weighs evidence, and a correct diagnosis results.

18 Gorham Street.

THE POSE OF THE BODY AS RELATED TO THE TYPE OF THE CRANIUM AND THE DIRECTION OF THE VISUAL PLANE.[1]

By GEORGE T. STEVENS, M. D., New York.

[Author's Abstract.]

IT IS a novel proposition that the position of the head in respect to the body or of the shoulders in reference to the back, that the carriage of the whole body in walking and the attitude of one in conversation, should be governed in an important measure by the form of the cranium. It will also, doubtless, be regarded as a bold assertion to say that all these positions and attitudes and even the gait of the individuals are largely modified, even in many instances controlled, by the normal position of the eyes in respect to the cranium.

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[1] Address delivered before the Section of Ophthalmology, Otology and Laryngology, Buffalo Academy of Medicine, January 21, 1901.

Yet it is not difficult to show that both these propositions are true and that the truth contained in them is not only of importance as a principle in art, but that it is of great practical value from the point of view of the well being of large groups of persons.

From the practical standpoint it may be said that, owing to the position of the visual plane in respect to the head, there may be comparative immunity from certain complaints and diseases, or a comparative predisposition to these very affections.

By the term "normal plane of vision" it is intended to express the direction of the lines of sight, the eyes being in a passive condition and the head being in "the primary position."

Under these conditions the lines of sight lie in an imaginary plane which may be coincident with, or somewhat higher than, or lower than, the plane of the horizon.

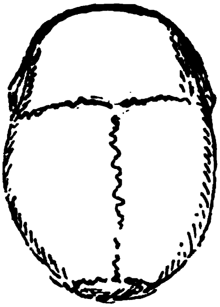

Fig. 1.

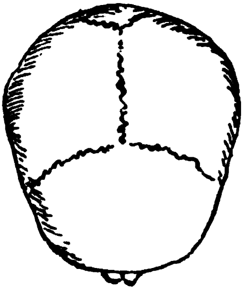

Fig. 2.

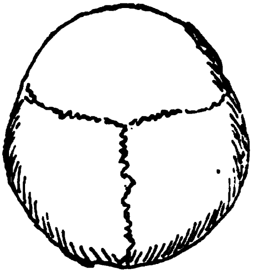

Fig. 3.

The form of the head of an individual is not always so clearly of one or another type that it must be classed as within a precise group, yet, in general, it may be said that heads are grouped by craniologists in three great classes or types. There are also sub-types, which need not now be considered. The types of crania are, the long, the broad and the medium, or, for this discussion, the tall.

Long heads have the transverse diameter, 75-100 that of the length, or less than that. In broad skulls the transverse diameter is 85-100 that of the longest diameter, or more, while medium skulls have an index between these. The series of diagrams, Figs. 1, 2 and 3, give the general outline of these types as seen from above.

In the next series of diagrams, Figs. 4, 5 and 6, is presented the idea of the general form of the head in each of these classes from a side view in living subjects. The normal visual plane does not occupy the same position in relation to the horizon in these three classes of heads.

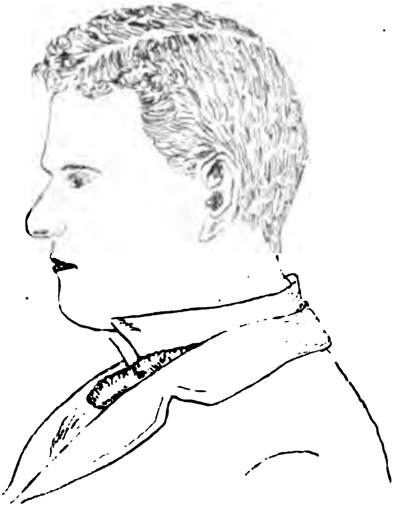

Fig. 4.

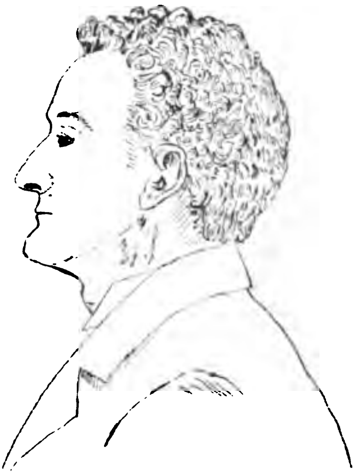

Fig. 5.

This can be determined in the living subject by the aid of the tropometer. In the prepared skull it can be determined by finding the direction of the orbital axis by a method which I have described.

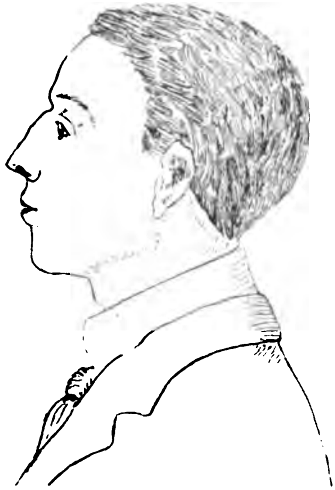

Fig. 6.

The form of the orbit in the different classes of skulls offers an explanation of the peculiarities in the direction of the orbital axis, as well as of the normal plane of vision.

Figs. 7, 8 and 9 represent front views of skulls of the long, tall and broad types, respectively. In the long skull the roof of the orbit is low and the floor is low, the axis points down. In the tall skull the roof of the orbit is high and the axis of the orbit is materially higher than in the other type. In the broad skulls the roof, as well as the floor is low and the direction of the transverse diameter of the orbital opening is oblique. The orbital axis points down.

Associated with the cranial index, the proportion between the long and short diameters of the skull, there is an important modifying feature in the facial angle. If, with the long skull, the facial angle is external (Fig. 4) and of a pretty high degree, the plane of vision is low. In case of the tall skull with slight facial angle (Fig. 5) the plane is high. In the case of the broad skull with inverse facial angle (Fig. 6) the plane is low.

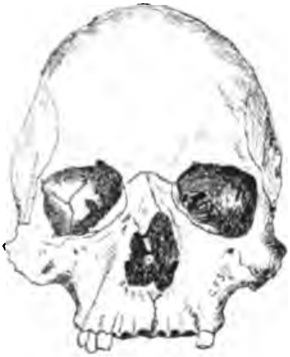
Fig. 7.

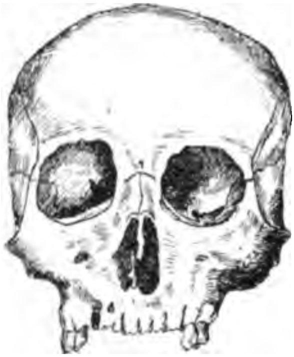
Fig. 8.

The person whose normal plane of vision is quite low throws the head back, lifting the chin (Figs. 4 and 6). On the contrary, the person whose plane of vision is normally high, throws the forehead in advance and the chin into the breast. (Fig. 5.) It is easy to see that this selection of an easy method of adjusting the lines of sight to surrounding objects, exercises a commanding influence on the whole pose of the body. Other elements which enter into the case may give rise to exceptions. These elements are, when they occur, quite evident and can be found. The exceptions can therefore be explained.

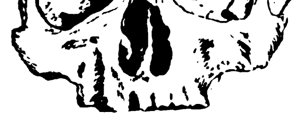
Fig. 9.

When the visual plane is quite low not only is the chin elevated but the muscles of the whole back, even those of the lower part, are habitually put in a state of tension. Hence, among the delicate people who have this peculiarity it is common to find pains in the muscles of the back of the neck, in the small of the back, and even in the lumbar region. In these people the brows are strongly elevated and there are other characteristic facial expressions. People with this class of head are more liable than others to certain physical complaints and nervous disturbances. They are also, to a large extent, immune to certain other forms of affections. Negroes of Guinea coast ancestry are less subject to consumption than the whites in similar localities in the United States. When they have not too great a mixture of white blood they have long heads, with very marked external facial angle. They have therefore a low visual plane and carry the chin high in the air.

Among the inhabitants of Iceland, who have very broad heads, and low visual plane, and who carry the chin very high, consumption is unknown, although their mode of living is most unsanitary.

People with tall heads and with faces with a very low angle or no angle have the brows strongly depressed and carry the forehead in advance (Fig. 5.) Their shoulders often bend forward, the chest is compressed, and their walk is characteristic. In this class is found the great majority of cases of consumption.

Some years ago the speaker called attention to the one-sided carriage of the head in those in whom one visual line tends higher than the other. In such cases, especially in those in which are also found certain forms of "declination," torticolis or scoliosis may and often does result.

The practical question which arises from the presentation of this subject is: can the direction of the visual plane be so modified as to change the pose of the body to advantage and thereby relieve the victim from the results of their physical peculiarities? An emphatic affirmative answer can be made. The eyes can be adjusted for any plane by a safe and speedy procedure, and the positions of the eyes due to the hereditary form of the orbits may be rectified: thus the handicap with which large classes of persons enter upon the course of life may be removed.

[NOTE.—The address was illustrated by diagrams and many photographs thrown upon the screen explanatory of the normal pose in the various classes, and the modifications effected in the attitude and carriage as the result of proper modifications of the visual plane.]

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THE sanatorium for consumptives, which was established by the government at Fort Stanton, New Mexico, has been a great success. In the first year and a half of its existence ninety-two patients were admitted from various marine hospitals, twelve of whom were discharged as recovered and fifteen as improved.—*Medical Age.*

Clinical Report.

CASE OF EXTRA-UTERINE PREGNANCY.

BY DR. L. G. HANLEY,
Gynecologist, Buffalo Hospital of the Sisters of Charity.

REPORTED BY CHAS. WILSON, M. D., Interne.

MRS. J., age 32, admitted to hospital January 15, 1901. Number of children, two; abortions, 3; menses have been regular till September 2, 1900, when they ceased. Six weeks from date of admission flowed for twenty-one days; has had abdominal pains and was confined to her bed for four weeks; complains of most pain in left side of abdomen, low down, radiating over region of bladder; frequent desire to urinate and act slow. She has had at different intervals during the past three months several fainting spells preceded by pain, and been obliged to summon her physician, who she says placed her in bed and ordered stimulants. Has been badly bloated at times; and gives a history of a brownish discharge from the vagina.

Examination revealed a mass in left ovarian region size of child's head; uterus pushed to right side. Diagnosis: ruptured hematoma. The usual preparation given and abdomen opened through median line. The peritoneum was adhered to the mass and showed the effects of inflammatory action; there had been rupture not only between folds of broad ligament but into abdominal cavity as well; adhesions broken up, and specimen enucleated, not en masse as it was very friable, containing the product of conception which was imbedded in clot, the blood being in a state of molecular disintegration. It was impossible to distinguish tube and ovary from parts of mass, the layers of external portion of tumor were decolorised and of a pale appearance, showing evidently that there had been several attacks of bleeding. After sac and contents were removed the abdominal cavity was flushed with a normal salt solution; right tube and ovary in healthy condition. One point of rupture was easily seen on anterior surface; wound closed with silkworm-gut; sutures removed on the twelfth day, union complete. Patient made a perfect recovery. The standard surgical technique was observed throughout the operation.

THE Surgeon-General of the Marine Hospital Service is preparing a translation of the Bertillon classification of the causes of death, to be sent to the various health-officers of this country. It would be a most excellent reform to have this classification generally adopted. Comparison of statistics would be greatly simplified. It is hoped this city will be one of the first to adopt the new plan.—*Cleveland Journal of Medicine.*

State Medicine.

REPORT OF THE COMMITTEE ON HYGIENE OF THE MEDICAL SOCIETY OF THE STATE OF NEW YORK.[1]

To the Medical Society of the State of New York:

YOUR committee on hygiene respectfully report:

To those especially interested in the subject of hygiene the events of the year last past afford substantial reasons for encouragement.

At our last meeting the topic of hygiene was prominently before this society in addresses, communications and discussions. During the year important hearings were held before legislative committees. The senate passed a bill appropriating $150,000 for the establishment of a State Sanatorium for the treatment of incipient consumptives, and although the opposition in the lower house cut this appropriation to $50,000, they were unable to prevent the passage of the bill, which went to the governor and was signed, thus enabling the closing year of the century to witness a sociological event of the first magnitude--the State of New York taking its first step in the great cause of state prevention of consumption.

Time and opportunity to hear and weigh objections to the proposition that the state should lead in the cure and prevention of this communicable disease, has but confirmed your committee upon the importance of the subject—the wisdom and timeliness of the action heretofore taken by this society, and the committee with all emphasis commends the principle to your fostering care, and once more recommends the necessary legislation.

The attention of your committee has been directed to another topic in local hygiene—closely related to the great question of consumption and perhaps only second to it in order of importance—the housing of the poor, particularly the poor of our chief city, the metropolis of all the Americas. In the City of New York this question of the unhygienic housing of the poor working man, has been the nightmare of sanitarians for more than half a century. How practical and important this question is, we get an idea when we recall that two-thirds of the people of the city live in tenement houses, many of these without adequate air or light or space or possibility of cleanliness; live under conditions so unnatural, so unhygienic that disease, poverty and crime, in an alarming degree are the inevitable incidents of life. Your committee commends this matter of work for the better housing of the poor, as a subject worthy of your warm and active sympathy and support, and with greater particularity, because in this work, as in many of the instances of state medicine, prevention is so much easier, so much cheaper, so much more economical than cure. Your committee advises that restrictive ordinances as to the construction of buildings intended for the occupancy of more than three families, be enacted and enforced by every municipality in the state; also, that local health authorities be encouraged in more careful inspection and more fearless condemnation of those now known or believed to be a menace to our public health.

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[1] Presented at the ninety-fifth annual meeting at Albany, January 29, 1901.

The State of New York annually expends some $25,000,000 in its various charities, and the greater part of this enormous sum is a penalty for our failing to protect the public health. Many think this is a speculative, a philosophic proposition; there was never a more intensely and exclusively practical proposition.

Your committee has also given consideration to the significance of the evil influence upon the public health of the two communicable diseases, gonorrhea and syphilis, and advises that efficient steps be taken to protect our people from these diseases, by bringing to bear upon them the principle of isolation, a principle of well-proven effectiveness in the control of communicable disease, from the days of Moses and the health ordinances relating to leprosy, down to the placard of today showing that there is diphtheria in the house.

To this end your committee invites consideration of the proposition: that in view of the continued existence of the communicable diseases, gonorrhea and syphilis, of the great influence of the former in the production of blindness, particularly in the newly born, and of sterility in our young men, and of pelvic disease and sterility in our young women; of the importance of the latter as a many-sided and wide-reaching factor in working individual family and racial degeneration; that it is desirable that these diseases be included in the list of communicable diseases, requiring notification and registry; that cities having boards of health take steps to secure the registry of all persons having the diseases named, and that such registration be lodged with the health authorities.

The intelligent conviction of the medical profession as to the relation of typhoid fever and impure water supply is bearing fruit. The cities of Albany and Schenectady, acting under judicious advice.

have taken steps to replace an infected water supply with pure water, with the prompt and usual result of immediate and emphatic fall in the typhoid morbility and mortality. These cities need no more to be classed with those of high typhoid prevalence, like Alexandria and Cairo, but with those of very low prevalence, like Munich and Vienna.

The result in Schenectady seems most satisfactory and impressive. Previous to 1897, that city had the unenviable notoriety of the highest typhoid mortality of any city in the state,—a state of many cities with discreditable typhoid records,—but since stopping the use of infected water the years 1898 and 1899 have passed with the lowest typhoid mortality of any of the twenty chief cities of the state. This would seem a favorable occasion to invite your attention to the scandalously high typhoid death-rate of the entire state as compared with that of many of the great cities of Europe—cities blessed with greater civic enlightenment, purer water supply and comparative immunity from typhoid morbility and mortality.

The cities of Munich, Vienna, Hague, Berlin, Rotterdam, Breslau, Hamburg, Zurich, Amsterdam, London, Edinburgh and Warsaw, are supplied with pure water and have an average annual typhoid rate of less than 8 per 100,000 population.

The cites of New York, Yonkers, Kingston, Utica, Auburn and Rochester are those of this state having the better water supply and the lower typhoid mortality, the average of the ten years preceding and including 1899, being 20.66 per 100,000 population.

While Oswego, Buffalo, Syracuse, Newburgh, Poughkeepsie, Amsterdam, Binghampton, Troy, Elmira, Watertown, Niagara Falls, Albany, Cohoes and Schenectady, use or have used an infected water supply, and during the ten years preceding and including 1899, have had an average annual typhoid mortality of 53.71 per 100,000 population; giving a total of twenty New York cities with an average typhoid mortality of 37.18, as compared with twelve cities of Europe with a typhoid mortality of 8.

Here, perhaps, we may profitably remind ourselves that this is the Medical Society of 'the State of New York; that this society should represent the medical profession of the state, and that in sanatory matters the medical profession is the light of the civic government, the inspiration of the civic conscience.

May we not resolve that while the new century is yet young, the deliverance from needless typhoid fever, which has been brought to the dwellers at Albany and Schenectady shall in like manner by our unceasing diligence be bestowed upon every inhabitant of the Empire State?

And, further, that it is sometimes desirable to consider our unworthiness and that we go down into the valley of humiliation and look upon these tell-tale statistics of European and New York typhoid mortality and see them as they are, a conclusive demonstration of our professional inefficiency in preventive medicine, as compared with our more fortunate brethren of Europe; that we ask ourselves why we have permitted and still permit this enormous typhoid death-rate, this frightful loss of time, of energy, of money, of life, by the disease, of all the communicable diseases, the most easy of prevention? Why we are in sanatory efficiency, in preventive medicine, so far below and behind our brethren of Europe? And your Committee on Hygiene in making answer would remind you that the energy of the gun is never more than the potential energy of the powder burned in the discharge—that the profession of Europe brings to the attack of sanatory problems breach loading rifles and smokeless powder, while we of the State of New York are but just beginning to see the first fruits of our long and discouraging crusade against the too long standing habit of infecting the medical profession itself, not with typhoid water or tuberculous milk, but with the more deadly infection, with the ignorant graduate of the incompetent medical college.

The sanatory problems of today will be mastered only by the use of modern weapons, in the hands of men of the highest efficiency and competency; bows and arrows, totems and medals are of the past, not of the present century.

Again, the medical profession of Europe speaks with a single voice while the people of the State of New York, where they should be encouraged, enlightened and led, are confused, disheartened and angered by a babel of voices from physicians, homeopathic physicians, electic physicians, and association physicians, with osteopaths, and Eddyites expected tomorrow.

To return to our military figure, the sanatory campaigns of the Empire State of the 20th Century will be efficiently, creditably, satisfactorily conducted only by a medical profession, kept at the highest state of efficiency and competency by state examination and state license, and united, at least for the purpose of promoting the public health, in the Medical Society in the State of New York.

There will be reason for thankfulness and congratulation when the time shall come for this unification of the medical profession, if the organic law of this society and of the county societies in affiliation therewith, shall be found as now, of that simple, broad and catholic character, under which honest and positive men united by many common beliefs and aspirations, can agree upon essentials while they disagree upon that which is less essential or non-essential.

In conclusion, your committee may be permitted to observe that many signs indicate that the demands of the present century upon the science and the art of the hygienist, are likely to be more trying, more exacting than those of the last. Competent statisticians confidently predict that before this century closes, the population of this country will exceed four hundred millions of souls, hence our successors in the Medical Society of the State of New York will be responsible for the lives and health of a people nearly as numerous as the present population of the nation. History has demonstrated over and over again that hygienic problems increase in difficulty and perplexity as populations become more dense,—as nations grow older, as wealth and luxury increase. History also abundantly attests the seeming paradox, that those medical men are the more prosperous, the more blest, who live and work amidst a people whose health does most abound; that the prevention of disease wins for the physician his highest emoluments—his chiefest honors.

The men to do this work must be men equipped with high personal and professional attainments, inspired by high ideals of duty and responsibility.

Respectfully submitted,

HENRY R. HOPKINS, *Chairman.*
M. A. VEEDER, JOHN H. PRYOR,
H. L. ELSNER, J. M. MOSHER,
GEORGE B. FOWLER.

Society Proceedings.

BUFFALO ACADEMY OF MEDICINE.

Section on Medicine, January 9, 1901.

REPORTED BY JULIUS ULLMAN, M. D., Secretary.

THE fourth regular meeting of the Section of Medicine was held in the Library Building, Thursday evening, January 9, 1901, Dr. ELI H. LONG presiding.

Dr. D. A. MORRISON read a paper, entitled,

REMINISCENT OBSERVATIONS OF MALARIA.

Dr. Morrison introduced the subject by referring to the past played by the plasmodium malaria and its classification into forms producing the quotidian, quartan and estivo-autumnal types of the disease. He remarked that up to the present time no record of its successful cultivation has been published, but that of late much new light has been developed on its transmissibility through the mosquito—the genus anopheles acting as the intermediary host. The writer spoke of his residence in the City of Buffalo for the past sixteen years, during which time he never had occasion to treat a single case of malaria, and compared this condition to that of the first years of his practice in the State of Iowa, where 50 per cent. of all cases treated by him were due to malaria and its sequences.

The geographical distribution of malaria in temperate climes and its constant prevalence in the tropics, because the soil, moisture and seasons with other conditions are almost perpetual for favoring its generation.

Dr. Morrison described the conditions of soil, climate and geological strata in that portion of Iowa in which he saw his patients, and showed how conducive they were for the propagation of the disease. During June and July of 1881 the preponderance of cases seen were the quartan forms, and with these cases many, especially children, developed a cerebro-spinal meningitis. In the following year the tertian variety of fever was prevalent. During the autumn of the first year there were many cases of remittent malaria, with a few cases of typhoid, while in the autumn of the second year an epidemic of typhoid prevailed, with a few cases of remittent fever.

In this territory there were many squatter settlers, those coming from Sweden and Norway seemed more susceptible to the infection. With the appearance of the tertian variety of malaria great swarms of gnats, mosquitoes and other insects appeared on the uplands during sunset. They would collect each variety by itself, usually on the west and northwest slopes of small knolls of land in close proximity to swamps. In the early morning, the whole surface of the plain would be enveloped .with a fog or low lying mist and as the sun advanced this would clear away.

Malaria was so common that the inhabitants accepted their miserable sufferings with the stolidity of fatalists. Many of the more intelligent inhabitants regarded the malady as due to a poison or miasm arising from the marshy lands, and that the poison was inhaled by them. Upon this theory they cultivated walls of sunflowers, hoping thus to filter this poison, and thus be afforded an immunity. It seemed that this really did act as a barrier, for fewer cases was seen among those thus protected. The sunflower evidently offered an obstruction to insect life.

The clinical symptoms of malaria in this locality were always typical; never atypical. The quotidian chills always occurred between 12 m. and 4 p.m. If pernicious in character, between 3 and 6 p.m. It was not uncommon to see victims while on errands of business to the village in hot summer months, bring blankets and overcoats and when the hour approached for the expected paroxysm, they would cover themselves after mounting some convenient box on the sunny side of the street and await the chill.

In all protracted cases there was enlargement of the spleen, liver, anemia, emaciation and loss of general vitality. It was noted that young cattle seemed to be infected with this disease. Young cattle were often found standing in the hot sun between 11 a.m. and 1.00 p.m. close to a wire fence, with backs humped and hair standing erect, suffering to all appearances a rigor or chill. This occurred every forty-eight hours, and although grazing was of the best, they would emaciate, and many died later of what was termed "black leg," which was characterised by edema of the extremities. The animals slaughtered in the fall showed enlargement of the liver and spleen.

The Indian who took up his abode in this locality was not exempt from malaria and cases of the intermittent type were seen in their camps. In the pernicious forms of malaria, the comatose occurred most frequently; the algid form was rare and the hemorrhagic form never presented itself.

In the treatment quinine was the specific. It was used during the attacks and as a prophylatic. The Swedes and Norwegians had regular family jugs, containing one gallon of equal parts of alcohol and water with a solution of quinine, representing five grains to the ounce. The Indian medicine man used roots, herbs, barks, and hearts of wood trees. A sample of a decoction made from the red heart of the ironwood tree was tested and alkaloid was found, which resembled quinine in taste, color, and other qualities.

DISCUSSION.

Dr. JULIUS ULLMAN said that it is becoming generally accepted as a fact that malaria is rarely if ever seen in people who live in Buffalo. In other words, those rare cases of malaria which appear are imported. Quinine, therefore, in large doses, is now fortunately prescribed with greater precision in this city. He recalled his experience of acting assistant surgeon at the Leiter General Hospital at Chickamauga in 1898. Each day the errors of the volunteer surgeons in camp and division hospitals were revealed. Fearful doses of quinine were given to typhoid fever patients, with the mistaken idea that malaria was prevalent. Some of the patients when brought to the hospital were absolutely deaf. Many came in a dying condition. It was a pity to think that many patients who died might have been saved, had the diagnosis of the case been made earlier and had they not lost valuable time by overdosing with quinine with the mistaken idea that malaria existed where it did not.

Dr. Ullman regarded the observation made by Dr. Morrison of having seen a disease in cattle, resembling in the paroxysm and the post mortem findings malaria in man as of importance, and hoped that further proof would in time accumulate on this statement. He referred to Texas fever or bovine malaria in cattle, in which there is a parasite somewhat similar to that in the human blood found in the red blood corpuscles, and here the intermediary host has been demonstrated as the tick; so also the potiosma of birds, in which the mosquito also acts as the intermediary host.

Dr. SINGER stated that he has not seen a case of malaria since he has practised in Buffalo.

Dr. DOWD reported a case of hemaglobinuria, showing a sample of urine therefrom. Briefly the history was as follows:

J. C., aged 25., M. About Christmas, 1899, noticed for the first time that the urine seemed to be very bloody; this has continued ever since, with the exceptions of a day or two at a time when it will be clear. Just previous to the appearance each morning, the hands and feet become very cold, also the back which becomes numb-like. At the same time he becomes very jaundiced, has fever and the pain extends up the back into the head, which aches violently, necessitating him to leave his work. The liver is very large. As the symptoms abate, headache, and the like, gradually disappear. Never had venereal disease, and there is no history of tuberculosis. Examination of urine shows: specific gravity, 10.30, very acid, opacity marked, of a blood-red character; indican increased; large number of granular casts, apparently casts of amorphous urates. No blood, no pus, few leucocytes; sediment consists of red colored débris, evidently broken down cellular elements, epithelium and amorphous urates.

Two years ago while a soldier in the West Indies (St. Lucia), had a severe attack of malaria. Has taken large amount of quinine, but trouble still continued. With the use of quinine, arsenic and iron the condition (blood colored urine) improved at once; in three weeks having but two attacks of discolored urine, accompanied by chills, and the like. No examination for the malarial plasmodium was made, the writer taking the opinion of a Montreal physician, who found these parasites present about a year ago. The spectroscope was not used, Dowd depending upon the microscope for the diagnosis.

Bastianelli says: this practically never occurs except in infections with the estivo autumnal parasite.

DISCUSSION.

Dr. GROVER WENDE thinks that the interesting case described by Dr. Dowd is one of paroxysmal hemoglobinuria, especially because the doctor remarked that the patient had taken large amounts of quinine without result, which is sufficient evidence to exclude malaria.

Dr Wende offers the suggestion that ice be applied to the skin because cold in this case is a causative factor.

Dr. MORRISON stated that malarial hemoglobinuria is associated with the attacks and paroxysms early in the disease. In view of the prolonged history of malaria (two years) without this complication makes some other cause than malaria suggestive.

Section on Ophthalmology, Otology, Rhinology and Laryngology, January 21, 1901.

REPORTED BY FREDERICK H. MILLENER, M. D., Secretary pro tem.

The fifth regular meeting of this section was held on January 21, 1901. The meeting was called to order at 9.05 p.m., by Dr. FRANK WHITHILL HINKEL, chairman, eighty-seven Fellows being present. The secretary, Dr. GEORGE F. COTT being ill, the chairman appointed Dr. Millener, secretary, pro tempore. The minutes of the previous meeting were approved.

Dr. HINKEL then introduced the speaker of the evening, Dr. GEORGE T. STEVENS, of New York, who addressed the section on

THE POSE OF THE BODY AS RELATED TO THE TYPE OF THE CRANIUM AND THE DIRECTION OF THE VISUAL PLANE.

See page 576.

The paper was discussed by Dr. LUCIEN HOWE, who stated that, if he understood the trend of the argument made by Dr. Stevens, it was this: (1) That by means of the tropometer we are enabled to ascertain in certain cases that the muscles of the eyes tend to direct the visual axis above the horizontal plane or below it, as the case may be; (2) this being ascertained, the author has found by measurement that these conditions belong to certain forms of the skull and, (3) accompanying this cranial formation, there is a certain expression of the face and pose of the head, which are characteristic. Or the proposition may be reversed, and we may say that certain facial expressions are so characteristic as to enable the skilled observer to diagnosticate the position of the eyes with respect to the horizontal plane, and therefore the condition of the muscles. Dr. Howe asked if he had correctly interpreted the author's views.

Dr. STEVENS replied that it was substantially the statement of his contention.

Dr. HOWE, continuing, remarked that he was sorry to be obliged to take issue with the author, and stated that we all appreciate his lifelong interest in the subject of the ocular muscles, and use generally of the nomenclature concerning them which he has suggested, but, though he comes so far to present this paper, he will not be surprised at the criticism of it, for he is a member of another society of which Dr. Howe is also a member, in which every statement is thoroughly criticised, and if a vulnerable point is presented in any one of the papers offered, the other members immediately take up the cudgels, and, if possible, throw the author on the defensive. With this spirit of scientific doubt and inquiry, therefore, he wished to take up briefly the three points in the doctor's argument.

The first is concerning the clinical value of the tropometer. He stated that he not only had had one of these instruments himself for three or four years, but also an opportunity to use another whenever desired at the Buffalo Eye and Ear Infirmary. After a measurement of a large number of cases, he was convinced that it is not possible to draw from it any such exact data.

The fact is that the muscular effort made by the patient is not always the same. For example, when he looked through the instrument and asked the patient to look up, he found the amount of elevation to be thirty degrees, and if the patient be urged suddenly the elevation passed to thirty-five or again perhaps to forty or more. Moreover, this difference varied on different days. In a word, after a long trial, it had been found unreliable.

Thinking, however, that the fault might be his own, he had brought here this evening one of Stevens's tropometers, and would be glad to have the test made before the members present, and have these statements as to inaccuracy refuted by actual trial, if that were possible.

As to the second point in the author's argument, he wished simply to remark that it has long been known that the form of the cranium bore a certain relation to the form of the eyes and, therefore, that part of the paper was not new.

Donders and Javal called attention to this in the later sixties and it became a part of ophthalmological literature. De Wecker corroborated the observations in a communication made by him in 1869, to the Anthropological Society of Paris, and in 1881, Landolt reviewed the subject admirably in an article in the *British Medical Journal*. In 1892, at the meeting of the American Medical Association, Dr. Stevens presented the paper which, with modifications, he has repeated this evening.

In this paper tonight, he has called attention to this well known relation between the form of the skull and the shape of the eye, but has gone a step further and elaborated the third point.

This third point, which he makes, is that in these peculiarities in the formation of the skull, the muscles of the eyes direct the visual axes above or below the horizontal plane, as indicated in a characteristic manner, in which the head of the individual is thrown backward or forward. Or, reversing this part of the argument, given, such a position of the head, it is possible from that to recognise a certain condition of the muscles?

Now, in regard to this third proposition, it is true that in a rough way some slight indication may be given as to the condition of the muscles, especially in cases of real paralysis. But, if the statement made by Dr. Stevens will bear the test of practice, then it can be easily verified.

Dr. Howe also said that in this audience of about seventy-five or eighty, he happened to know of at least three individuals, who have a high degree of heterophoria of the kind mentioned. And if the facial expression and pose of the head of such person or persons is so diagnostic, then he would ask the author to pick out these or any other similar cases from among the rest. There need be no question as to the accuracy of the choice, for Dr. Howe purposely brought here a tropometer, a clinoscope, a phorometer, and all the apparatus necessary, and they were in the adjoining room. It, therefore, was only fair to ask for a demonstration of the fact, and if proven, Dr. Howe would be prompt to acknowledge that his views, and not Dr. Stevens's were wrong.

Dr. STEVENS in reply said: In reference to the statement that Donders and other European writers have treated of the subject which has been presented this evening, I may state in the most emphatic manner that Donders never wrote a line which indicates that he had ever thought upon this subject. Nor did any European writer ever discuss this subject in any of its phases before it was presented by myself. The fact that someone may have written of microcephalic and distorted skulls in association with undeveloped eyes, has no possible relation to the subject here discussed.

As to the statement that one has attempted to use the tropometer and has failed to acquire useful information, the same may be said of the microscope or of any other technical instrument. Skill is required in the use of the tropometer, as it is in the use of the microscope. No one gains useful information from the use of scientific instruments who does not bring to their use scientific methods and an unprejudiced mind.

Dr. **Alvin A. Hubbell** moved a vote of thanks to our distinguished colleague, stating that those who know him best appreciate his efforts. Many of us know very little about this subject, and he may startle us, but Dr. Stevens has startled the world before. Seconded by Dr. Howe and carried unanimously.

Meeting adjourned at 11.15 p.m.

Section on Obstetrics and Gynecology, January 22, 1901.

Reported by WM. G. RING, M. D., Secretary.

The regular monthly meeting of this section was held at the Library Building on Tuesday evening, January 22d, at 8.30 p.m., and was called to order by the chairman, Dr. A. J. **Colton**.

The minutes of the previous meeting were read and approved.

Dr. **Stephen Y. Howell** read a paper entitled,

THE KIDNEYS AND THEIR RELATION TO OPERATIONS.

DISCUSSION.

Dr. M. D. **Mann**.—This subject has interested me for years and I think what Dr. Howell says is true. If there is danger in the use of the ordinary anesthetics it behooves us to use only the best anesthetic. In five cases of my own, all fatal, ether was used. One patient had had Bright's disease previously. Operation was followed by suppression of urine and death. We tried different anesthetics. The urine was examined for albumin and casts. After ether 50 per cent. had albumin and casts persisting from four to ten days.

Dr. Roswell Park uses chloroform; I use ether– same results. I have been careful to carry out the line of treatment, Dr. Howell suggested—namely, hot air baths, water and alkalies before operation. Notwithstanding all this care you cannot take all precautions. I think there is just as much danger from chloroform as from ether—from chloroform patients die on the table; from ether, later. When gas is used it takes less ether. I do not believe that if the kidneys are healthy we will get bad results.

In examination of the urine I like to estimate the total solids for the twenty-four hours. Ethridge gives a table of the total solids in the urine for a given weight and age. I do not believe urea is the toxic agent in urine. If the kidneys are diseased both chloroform and ether will work harm. I had a patient with cancer of the cervix with hemorrhages. I removed the uterus and she passed urine the following morning. After second catheterisation she never passed a drop. Applied treatment, but patient died. Post mortem showed me kidney atrophied almost to nothing; the other was a large white kidney containing in its pelvis seven or eight stones. This question of anesthetics is an extremely important one and brings us down to the question of cocanisation of the cord.

Dr. E. A. Smith.—I wish to say that the paper is a timely one; it carries a warning to us all. Have been assured in so-called emergency operations by attending physician that everything was all right, but have taken urine for examination and found differently. He cited a case were both sugar and albumin were found. Another case diagnosticated as colecystitis, proved to be a kidney full of pus. Removed kidney by anterior route, took a sample of the urine and found it loaded with pus. I agree with Dr. Mann as to precautions to be taken.

In one case where urea was found to be deficient, the operation was postponed and the patient sent home for treatment, preliminary to operation, which was performed later with good results. With some cases, when kidney is in bad condition, have seen good results when ether was used. I would also recommend the use of salt solution, per rectum, after operation.

Dr. F. W. McGuire asked if urea was toxic; if so, what importance attached to its absence?

Dr. Ludwig Schröter asked if absence of albumin and casts was evidence that kidneys were in good condition? I think not, and cited a case.

S. Y. Howell, in closing the discussion, said he was pleased with the discussion of his paper, although it was not complete enough to cover all questions. Creatin and creatinin are toxic, but the greatest toxicity is in the inorganic solids. But few urinometers are accurate and in taking the specific gravity, many fail to take into consideration the temperature of the urine tested. Often times it is necessary to make repeated examinations of the urine.

The whole question is an interesting one. The question of ingestion of nitrogenous food, age, tissue metabolism, and the like, should all be taken into consideration, as none of the tests are absolute.

Meeting adjourned at 10 p.m. Members present, 20.

Section on Surgery, February 5, 1900.

REPORTED BY J. HENRY DOWD, M. D., Secretary pro tem.

The Surgical Section of the Academy of Medicine was called to order at 8.45 p.m. by the chairman, Dr. MARSHALL CLINTON. Dr. J. HENRY DOWD was appointed secretary pro tem.

The minutes of the last meeting were not read on account of the absence of the secretary.

The secretary, pro tem., read a telegram of regret from Dr. Samuel Alexander, of New York, who was scheduled to present a paper before the section this evening. Owing to the serious illness of his brother, Dr. Alexander said it was impossible for him to be present.

Dr. MARCEL HARTWIG showed a case on which he had operated for continuous vomiting, the man vomiting everything he put in his stomach for the past three months. A diagnosis of stricture of the pyloris was made and such proved to be correct at operation. The Doctor could not say whether cancerous or not. Since operation there has been no vomiting and the patient gained 7½ pounds in one week. Soon after the patient recovered from the anesthetic, it was found he had a paralysis of the right arm. Dr. Hartwig did not attempt to explain the cause, excepting to say that a person unconscious from an anesthetic is insensible to pain, but he should be treated gently just the same, and in his opinion the paralysis in question was due to some one grabbing the patient forcibly with fingers in the axilla, and in this way has damaged some of the nerves in that region.

Dr. DOWD showed a foreign body removed from the bladder by the perineal route. The patient was referred by Dr. W. G. Gerber and complained of frequency of urination, the act being accompanied by great pain and a free flow of blood after the urine. As a cause for the condition the young man—aged 25 and every appearance of suffering from some degeneracy of the nervous system—said he experienced some pain in urinating about December 4, 1900, and thinking there was something in the urethra proceeded to operate upon himself with a wax taper—commonly used for lighting gas, at least eighteen inches long—which slipped from his grasp and had entered the bladder. The patient was sent to the hospital, perineal section made, and with but very little trouble the substance was withdrawn. There is no doubt that the true reason for the patient using the wax taper in the urethra was to titilate the caput gallinaginis, and thus produce an orgasm, as when coming from the anesthetic he tried to masturbate.

Dr. CHAUNCEY P. SMITH read a paper entitled,

CONSERVATIVE SURGERY OF THE EXTREMITY.

He reported several results, which owing to the damaged condition of the parts should be considered exceptionally good. Emphasis was put on the statement, never to put a drainage-tube in a joint, as by the pressure exerted on the cartilages it was liable to cause their death. He cited several cases of compound fracture near the ankle joint, in which after thoroughly scrubbing of the wound with salt solution and approximation of the parts, the wound was closed tightly and good results obtained in every case. Continuous immersion in hot salt solution was recommended where the part was on the point of gangrene; he stating that even where the tissues were beginning to turn, good results had been obtained in the prevention of the gangrenous process.

The case of Mr. Hood, the man who was bitten by a bear at the zoo,was shown. Although there was a destruction of most of the parts near the wrist-joint, there was sufficient blood supply left to insure life to the hand and the member, although quite badly crippled, was much better than none at all.

Dr. KENERSON read a paper entitled,

SURGICAL COMPLICATIONS OF TYPHOID FEVER.[1]

He spoke from his experience while a contract surgeon in the U. S. Army, at Fort Meyer, Va., dwelling at length upon cases of peritonitis, intestinal hemorrhage, pleurisy, parotitis, epididymitis, orchitis and phlebitis, that had come under his care.

The third paper of the evening was presented by Dr. LE BRETON, entiled,

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[1] To be published.

OPERATIVE TREATMENT OF TUBERCULAR LYMPHOMATA OF THE NECK.

The subject was dealt with in detail, laying special stress on the incisions and the care of the bloodvessels in the surrounding parts. for this work the author advised the incisions of Hartley and Dowd (C. N. of N.Y.,) both of which he described most minutely.

Dr. C. P. Smith made a few remarks, in which he drew a plan, showing how easily the gland could be removed from Scarpa's triangle.

Meeting adjourned at 10.30. Attendance, 17.

Suggestions on the Manner of Using Protargol.—Having passed the experimental stage it may now be safely asserted, that protargol is one of the most important additions to the materia medica of recent years. Aside from its general use in the treatment of gonorrheal affections, it has to a great extent displaced nitrate of silver in diseases of the eye, ear, nose and throat. To obtain uniformily good results, attention has been lately drawn to the importance of exercising proper care in making the solutions, a point which has been specially emphasised by Professor Neisser. A clear and satisfactory solution can be secured in any one of the following ways: Stir the protargol powder into a thick and smooth paste with a little cold water, and then add the bulk of the fluid. This should be done in a glass or china vessel, using a glass rod; if in a mortar, the latter as well as the pestle should be slightly moistened with a few drops of glycerine. Protargol may also be readily dissolved by dusting the powder evenly upon the surface of the water and allowing the fluid to stand without stirring for about ten minutes. It is very essential that only *cold* water should be used in making the solutions, as with warm water the drug is to some extent decomposed, and then becomes less active and may cause irritation; for the same reason the solutions should be preserved in dark colored yellow bottles. In acute gonorrhea the average strength of the solutions ranges from 1 to 10 grains to the ounce; in chronic urethritis, up to 30 grains; in diseases of the eyes, ears, nose and throat, 10 to 60 grains; as an application to wounds and ulcers, 1 to 2 per cent. solutions and 5 per cent. ointments are in use. Unlike nitrate of silver, portargol does not stain the skin even in concentrated solution. The solutions commonly employed in gonorrhea also do not produce stains of the clothing, or if they do, only cause slight discoloration, which can be easily removed with warm soap water; stains by stronger solutions, if recent, can be removed with soda and ammonia; if old, by the action of peroxide of hydrogen in the presence of ammonia.—*Therapeutic Suggestions*.

BUFFALO MEDICAL JOURNAL.

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EDITOR:

WILLIAM WARREN POTTER, M. D.

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THE MEDICAL SOCIETY OF THE STATE OF NEW YORK.

THE ninety-fifth annual meeting of the Medical Society of the State of New York was held at Albany, January 29, 30 and 31, 1901. From all sides the verdict rendered is, that from a scientific, social and economic standpoint, it took rank as one of the better meetings in the history of the society. The presence and coöperation of the President of the American Medical Association, Dr. Charles A. L. Reed, of Cincinnati, O., added not a little to the interest and good feeling manifested by the large number of representative physicians present from all parts of the Empire State.

The President of the Society, Dr. A. M. Phelps, of New York, directed affairs with forceful dignity and with the aid of the business committee, under the chairmanship of Dr. Frank Van Fleet, of New York, despatched an enormous amount of business during the short space of time at the disposal of the society. Perhaps it might be as well in the future to curtail the number of scientific communications, and give each contributor sufficient time to finish his contribution and allow reasonably untrammeled discussion.

The president in his inaugural address advocated a number of innovations, prominent among which were the organisation of an Atlantic Coast Medical Association, similar to the interstate associations in the west, an amendment to the constitution allowing each county society to send two delegates annually from each assembly district, and the holding of a semi-annual scientific session of the society in the fall of the year in one of the large cities of the state. His remarks were given close attention.

The report of the standing committees were as usual of the utmost interest and importance; especially so to the Buffalo members were the ones on hygiene and prize essays. Dr. Henry R. Hopkins's report, as chairman of the committee on hygiene, printed in full in this journal, was a masterful review of the sanitary conditions existing, and the progress making in the housing of the poor, the water supplies of cities, and care of the incipient cases of tuberculosis. The prize essay committee, of which Dr. Abraham Jacobi, of New York, is chairman, announced the award of the Merritt H. Cash prize for 1901, to Dr. Lucien Howe, of Buffalo.

The president introduced Dr. Charles A. L. Reed, who was enthusiastically received, and spoke as follows:

Mr. President and Fellows of the Medical Society of the State of New York: I call you "fellows" in a spirit of fellowship, because I have been one of your fellows, much to my gratification, for the last ten years. It affords me extreme pleasure to stand before you today in response to the cordial invitation of your president. When it was my privilege to appear for the first time before this distinguished body, ten years ago this day, I came simply in my capacity as a humble worker in the ranks of the profession; today I am introduced to you as the president of the national organisation, although no less a humble worker. The terms in which I have been presented to you makes the duty a pleasing one of extending to you, in the most cordial spirit, the greetings of the American Medical Association. I have been informed that such messages have been a trifle unusual in the past (laughter,) and I almost feel that I am in a foreign country, yet it seems to me that you are wrestling with precisely the same problems which have confronted the medical profession in Ohio, and in most of the other states. For a proper solution of this it has been found necessary to have the absolute unity and coöperation of the entire profession. If the American Medical Association stands for one idea over and above another, it is for the unity and for the solidarity of our great national profession. If there is today one spirit actuating it over and above another, it is the spirit which I have expressed in the words just pronounced. This is the one assurance which I bring you, and I am satisfied, from the expressions which I have heard in Albany, that that sentiment is very cordially reciprocated.

I am sure, when we gather in our national council in St. Paul next June, we shall be nearer an understanding on the unfortunate questions which have divided us for nearly two decades, than we have been these many years.

I am gratified, indeed, to notice the expressions which have cropped out in these proceedings this morning, to which I have been a very attentive listener, as they indicate that there is a disposition in your body to be democratic, and to bring within the fold of this society the workers in the ranks of the profession. In my various goings about the country, I have found that those societies seem to be doing the most good and accomplishing the greatest results, that have been able to bring within their ranks the largest numbers of the medical profession. The weak man needs the society, and the strong man is needed by the society; hence we need them all, but the society must be given a proper degree of respectability. Therefore I view with satisfaction the initial step which you have taken today, looking to the broadening of your influence within the limits of your own state, feeling sure that that influence and that solidarity will sooner or later inure to the benefit of the great national body of the profession. I thank you, Mr. President, for your cordial reception.'' (Prolonged and hearty applause.)

The annual address of the president on the second day on the Radical Cure of Inguinal Hernia, was a comprehensive review of the subject from the commencement of the Christian era down to the beginning of this twentieth century, and the reader asserted that we had arrived at the last stage of perfection in the technique of the operation for its radical cure.

The annual dinner given at the Ten Eyck was attended by a large number of members, delegates and guests.

The officers elected for 1901 are as follows: President, Henry L. Elsner, of Syracuse; vice-president, Louis N. Lanehart, of Hempstead; secretary, F. C. Curtis, of Albany; treasurer, O. D. Ball, of Albany.

It was decided to hold the first semi-annual session in New York City.

AND BAALAM'S ASS SPAKE.

THERE is a person in Buffalo known among his intimates as Rev. Moses Hull. He is pastor of the Spiritual Temple which more or less flourishes according to the attendance of its habitués. Not knowing where this spiritualistic person received his degree or what claims he has to reverence, we cannot say how well or how illy he has been educated.

However, he preached a sermonette not long ago which is quite the most remarkable bit of brain-oozing which has been turned loose in many a day, and it would appear to be worthy of the person who relieved his mind of it. How horrible is the contemplation of what a congregation must suffer at the mouth of such a preacher when they can't talk back. They must just sit and be deluged with rot,—spiritual, temporal, political, social, moral and fashionable,—and say "amen" with deep grace, and a feeling of earnest thanksgiving that Sunday comes only once in seven days.

But to return to the discourse on vaccination by the Hull person, who talks to spiritualists in a Temple of spiritualism on earthly matters. How bizarre! He started off by jumping into his subject with both feet as it were. After announcing that spiritualism was the advance guard in the interests of humanity, wherein he rather disagrees with his fellow fanatics, the christian scientists, he went on to say, that at the last meeting of the National Association of his faith, the following resolution was passed:

> *Resolved,* That compulsory vaccination is not only unwise, unconstitutional and un-American, but dangerous to health, causing eczema, erysipelas, cancers, tumors, and often death.

One might wonder where all this highly interesting information came from, had not the reverend spiritualist in the next paragraph said this:

> Tuberculosis should have come in among the evils here enumerated, for vaccination is the cause of more pulmonary consumption than any other thing in the world. I was chairman of this committee on resolutions, and I have ever regretted my shortsightedness in omitting that one word.

He should have gone on and not content with adding tuberculosis, hitched on a few other ailments. Of course, he overlooked piles, and pus, and pregnancy, but maybe he will take them up at some future time, provided he can reconcile those conditions with spiritualism.

> Facts from every part of the world, he continued, will demonstrate that at least one half of the consumption originates in vaccination. If the charges in this resolution are true, vaccination not only fees a gang of hungry doctors at the expense of the public, but it lays the foundation for future harvests at the expense of a suffering public.
>
> We affirm in this resolution that vaccination is unwise. It teaches a bad lesson; it takes the mind from the true remedy for smallpox, and it has caused the public, which trusts in its doctors, so-called, to cease to look for the true cause and real remedy for smallpox.
>
> I now assert that it is unconstitutional and un-American for a policeman to come in with a club, and assist a butcher with a lancet in arresting our children, who have committed no crime—to overcome them by the power of brute force, and inject into their system a poison worse than any rattlesnake carries in his fangs. Such things as vaccination of terrible criminals for heinous offenses, might do to go with capital punishment. Under any other circumstances, it is too barbarous to be tolerated in an enlightened republic.

Nor is it just to deprive children of an education, because their parents, their natural protectors, refuse to have them poisoned. These laws have been enacted in nearly all of the states. It is the worst kind of class legislation, a legislation which, in New York City alone, will this year put $4,000,000 of the people's money into the pockets of the members of one profession, and at the same time lay the foundation for disease enough to keep the doctors busy all their lives. It is the worst kind of class legislation, and has been so decided. I would prefer to give the doctor a thousand dollars to keep away from my house, than to pay him one dollar to come in and poison my family.

And so he discoursed, preaching the gospel on Sunday, damning the doctors, and talking rot.

The BUFFALO MEDICAL JOURNAL is a firm believer in religious freedom. Every man has an inalienable right to worship as he pleases, how he pleases and at his own convenience, be he spiritualist, christian scientist, or Dowieite. Christianity and education draw the line sharply at idolatry and fanaticism, and that's where these classes of worshipers at fad shrines come in. The christian scientists idolise mother Eddy; and Mr. Hull, to be charitable, is fanatic. A grown up christian scientist has a perfect right to decline medical attendance, if that's his honest belief, but he has no legal or moral right to deprive his baby of proper attention when it is ill, no more than the Hull person has to use his pulpit and position to disseminate such blatant error. Thinking over this eminent spiritualistic divine's discourse, one cannot help coming to the conclusion that after all smallpox isn't the worst thing in the world.

UNIVERSITY DAY.

THE University of Buffalo has adopted February 22d as University Day and celebrated it with appropriate proceedings this year. In this it follows the usual course of colleges and universities in establishing a custom which becomes an important event on the calendar. In founding the day the council and faculty have chosen appropriately, since the first public college work was done February 24, 1847. Washington's birthday being a legal holiday and falling so close to the anniversary of the beginning of the first course of medical lectures makes the action of the boards a befitting one.

The exercises began in the morning at the Star Theatre and, in true college fashion, the collegians heralded the joyous occasion. The auditorium of the theater was handsomely decorated with the national and college colors, banners and insignia. The class fraternities were present in full force and fine array, and the theater was well filled when the ceremonies began.

Promptly at 11 o'clock the council and faculties of all the departments marched upon the stage amidst rounds of applause. The exercises began with a prayer by the Rev. O. P. Gifford, after which the chancellor of the University, the Hon. James O. Putnam, made a short address, taking for his theme the history of the University. The University double quartette then sang a Pickanniny lullaby, which was warmly applauded.

The chancellor introduced Dr. Rush Rhees, president of the University of Rochester, the subject of whose address was "Success." The University mandolin club then gave a selection from the Fortune Teller, after which America was sung and the benediction pronounced. A fine selection by the orchestra ended the exercises.

Dr. Matthew D. Mann, dean of the medical faculty, and Mrs. Mann, tendered a reception to the faculty and students from 4 to 6 in the afternoon.

The evening was appropriated by the alumni of the medical department in giving their third mid-winter reunion, which took place in the Alumni Hall of the University building. At 8 o'clock the Rev. Frederick J. Hillig, S. J., professor of sciences at Canisius College, demonstrated the physical and physiological effects of ultra-violet light. In the course of his demonstration he introduced many interesting experiments, among which was the exhibition of Professor Zickler's new light-electric telegraphy (wireless) and Professor Strebel's apparatus for killing bacteria with ultra-violet light. These experiments were successfully conducted, were entertaining as well as instructive and the professor was frequently interrupted with demonstrations of applause.

Dr. M. Hartwig, president of the Buffalo Academy of Medicine, followed with a short address on the German Doctor, interspersing his remarks with witty stories of professional life in the fatherland. He spoke of the "Staats Examen," giving a brief description of it and strongly endorsing its analogue, which is being established by many states in this country.

Professor Roswell Park was next introduced and gave some interesting reminiscences incident to professional study in Europe. In the course of his remarks he referred to the school of Salernum, which became so celebrated during the middle ages, but of which there is now not a vestige remaining by which even its location can be determined with certainty. He said the effect of this school upon future medical history was very important.

Dr. Frederick C. Busch, professor of physiology, delivered an interesting address upon Student life in Switzerland, describing especially his recent visit to the University of Berne.

Dr. A. W. Bayliss, vice-president of the alumni association, presided in the absence of the president, Dr. D. W. Harrington, who was ill. Dr. Bayliss read a telegram of regret from Dr. W. H. Bergtold, of Denver, Col. A vote of thanks was tendered to the speakers and committees and the large audience then adjourned to the library where refreshments were served.

The exercises were interspersed with orchestral music and the entire proceedings were eminently befitting the occasion and bespoke in a most emphatic manner the success of the great University. Such a day as thus imperfectly outlined cannot but serve to stimulate closer friendship between the University and the community.

The committees who arranged the several exercises were composed as follows: On the part of the University faculties—Dr. Eli H. Long, of the medical department; Dr. Willis G. Gregory, of the department of pharmacy; E. Corning Townsend, of the department of law and Dr. W. C. Barrett, of the department of dentistry. On the part of the Alumni Association, Dr. Albert T. Lytle, Dr. Grover W. Wende, Dr. H. U. Williams, Dr. F. W. Barrows and Dr. T. H. McKee. These committees deserve great credit for the splendid manner in which their work was done.

MOTHER EDDY IS COMING TO!

ONCE more Mother Eddy has come out of her retirement long enough to speak and she has spoken. She has said words of wisdom and has shown more of a spirit of wisdom than is contained in all the closely written pages of the books which bear her name as author. Truly a change—a marvellous change—has come over the spirit of the dreams of this wonderful and mysterious veiled prophetess, whose fire is seen only by the chosen, and whose written words are copyrighted and sold at so much per copy to thousands of followers of the sweet superstition which fosters the crime of law-breaking.

Health Commissioner Wende, recently in Buffalo, made a bitter fight to compel the followers of Eddyism to report contagious diseases. They employed counsel and fought back. They contended that because there was no disease they could not report what did not exist. Several very estimable ladies who hold diploma-mill licenses to practise christian science, made exhibitions of themselves by flaunting their beliefs in the faces of the city authorities and talking very bitterly and with unbridled tongues concerning Dr. Wende's efforts to maintain a low rate of mortality. They denied disease as Peter denied Christ—with open eyes; and they have notoriously been anti-vaccinationists.

How now must they feel to receive this latest proclamation from the fountain head of their beliefs, the Holy of Holies of Eddyism—that mysterious castle in the east, builded in truly regal style with the money wrung from the thousands of deluded creatures who thrive on superstition and exist on beliefs. Remember that christian science has always opposed vaccination; remember that the fundamental principle of christian science has always been its "belief" that disease does not exist; that there being no such condition as disease, contagion could not be reported. Remember this and then read these words of Mother Eddy sent broadcast throughout the country over the wires of the Associated Press.

> I have always believed that christian scientists should be law abiding. Rather than quarrel over vaccination, I recommend that if the law demand an individual to submit to this process he obey the law and then appeal to the gospel to save him from any bad effects. This statement should be so interpreted so as to apply, on the basis of christian science to the reporting of contagion to the proper authorities when the law so requires.

This statement is given just as it came from the heart of Mother Eddy, and, *en passant*, it arouses interest in the oft-repeated statement that the woman who is now known as Mary Baker Eddy is not the writer of these beautifully turned sentences which appear in the books and writings bearing her name. Either that or her editor did not have a chance to correct the grammar in her latest pronunciamento.

But, leaving aside these trivial questions of identity, is it not a queer position christian scientists find themselves in just now? They have fought bitterly, as being antagonistic to their beliefs, against doing the very things which they are virtually commanded to do by their demi-goddess up in Concord, New Hampshire.

Mother Eddy is apparently rapidly nearing the mourners' bench. Awhile ago it was reported that she had had her teeth fixed, and had uttered a distinctly human and feminine "ouch" when the dentist's instrument got in its deadly work. Now, she recommends vaccination and the reporting of contagious diseases. Can it really be that the recognised head center of the greatest superstition of centuries is coming to, or is she really and truly alarmed at the prevalence of smallpox and wants to get vaccinated? Who knows? Women are curious creatures, and they are feminine even if they are christian scientists and can see their children die with impassive faces while their thoughts turn to the edited words of a mysterious old woman up in New England for comfort.

A REPORT from London states that the county council has virtually adopted a proposal to spend £1,500,000 on a scheme for the better housing of the poor of that great city. This is a matter in which King Edward is greatly interested. It would become the City of New York, and even some other American cities, to take pattern after London in this important sociological movement.

THERE are a number of bills in the legislature this winter that need careful watching by the medical profession. The bill to define the practice of medicine is one; a bill introduced by Senator Davis legalising osteopathy is another; one to compel the indorsement of the licenses of other states, no matter what their standards, is a third. The first named should pass; the others should be defeated. The osteopathy bill is absolutely without excuse and is offensive in verbiage and meaning. Senator Davis, its sponsor, has taken a number of steps backward in presenting this measure.

THE REED & CARNRICK clinical laboratory, located at 42-46 Germania Avenue, Jersey City, N.J., is doing a splendid work for physicians, in helping them more accurately to diagnosticate disease. The value of such assistance is so far-reaching that it cannot be estimated with readiness. It applies to all diseases of the kidneys with special force, in which the correct methods of the laboratory can only determine the variations in metabolism going on in the body, the relation of nutrition and waste, together with many other important data.

Again, the examination of the blood is constantly increasing in importance, and seems to tell a tale of unerring accuracy in the anemias, leukemias and malarias—one only to be learned through this means.

The importance of sputum examinations in pneumonic affections, too, is essential to correct diagnosis, especially in the early stages of phthisis, or even when it is suspected, for then is the important period to patients and friends.

At the laboratory referred to the prices are so reasonable that the examinations are brought within the money reach of almost everybody. We append a partial schedule of fees for the information of our readers.

Urine. —Complete analysis and microscopical examination, including complete qualitative analysis, quntitative analysis of urea, quantitative analysis of sugar or albumin, if present, microscopical examination, Ehrlich's diazo-reaction and other tests, $2.00; quantitative analysis of the following constituents: Uric acid, chlorides, sulphates, phosphates, oxalates, acetone, each, $2.00; bacteriological analysis for tubercle bacillus, $2.00; bacteriological analysis for gonococci, $2.00.

Blood.—Number of red and white corpuscles, $2.00; hemoglobin estimation, $1.00; Widal's typhoid test, $2.00; staining and pathological report, plasmodium malariæ, etc., $2.00.

Serum Culture.—For bacillus diphtheria, $2.00.

Sputum.—Thorough microscopical examination and examination for tubercle bacillus, pneumococus, etc., $2.00.

The Maltine Company recently has taken a stand that is calculated to give it a still stronger hold upon the confidence of physicians. It is announced that the company in future will not only refuse to supply the maltine preparations to department stores, but will refuse to supply them to dealers who are known to sell them to department stores. Heretofore, it has been the practice of the company to refer all inquiries, requests for literature or samples from laymen, to local physicians for their information. These and many other methods adopted by this house indicate a desire to conduct its affairs in such a manner as to merit the approbation, not only of the medical profession in general, but of the most pronounced sticklers for ethical regularity between physician and manufacturing pharmacist. We deem this matter of sufficient importance to invite attention to it in these columns.

THERE is a judge in Philadelphia by name Wiltbank, who in a recent ruling set himself up as a most heartless person. In the trial of a recent case, a physician who had been called as a witness was late. He had been detained at the bedside of a patient who was dying and explained fully to Judge Wiltbank the reason for his tardy appearance.

Everyone accepted the excuse, except the judge, who promptly fined the physician for contempt of court. Later he remitted the fine and at the same time placed himself in a position, which to say the least is most unenviable, when he said that "it was better that the patient had died rather than that the court should be treated with contempt."

Such a court as exemplified by Judge Wiltbank must need be chary of its contempt, for by his brutal and heartless ruling Judge Wiltbank has placed himself beneath the contempt of every decent-minded human being. He occupies an unique position of loneliness. He is a class unto himself.

PERSONAL.

Dr. Lucien Howe, of Buffalo, was awarded a prize at the recent annual meeting of the Medical Society of the State of New York, for an essay entitled, "On the measurement of the intraocular base line and the size of the meter angle." The fund for this prize was bequeathed by Merritt H. Cash, a former member of the society. The accumulated value, about $100, is to be given in the form of a medal, if desired.

Professor Joseph McFarland, M. D., of Philadelphia, a recognised writer, teacher and authority on bacteriology, has removed to Detroit to engage in scientific research in the biological laboratories of Messrs. Parke, Davis & Co. Professor McFarland will thus become an associate of Drs. Charles T. McClintock and E. M. Houghton in the important field of biology and bacteriology.

Dr. James T. Burdick of, Brooklyn, has been appointed Surgeon of the New York Soldiers' and Sailors' Home at Bath, vice O. W. Smith, resigned. It is reported, however, that Dr. Smith recalled his resignation before it was acted upon, and hence will contest the action of the trustees in appointing his successor.

Dr. P. W. Van Peyma, of Buffalo, has been elected chairman of the Board of School Examiners for the year 1901. Dr. Van Peyma's great interest in the schools and his untiring energy in their behalf is ample justification for this action of the board.

Dr. W. Scott Renner, of Buffalo, will sail for Europe, March 6, 1901. He will spend about two months in Berlin in the further study of the specialty with which he has been successfully identified for several years. He will return about May 20th.

Dr. J. Hilton Waterman, of New York, has been elected secretary of the Harvard Medical Society of New York City for the year 1901. Dr. Waterman's many Buffalo friends will be pleased to learn of his preferment to this post.

Dr. Matthew D. Mann, of Buffalo, has been appointed Park Commissioner of this city in place of Mr. C. R. Huntley, resigned. Dr. Mann's commission holds until May, 1902.

Dr. Dewitt G. Wilcox, of Buffalo, was elected secretary of the Homeopathic Medical Society of the State of New York, at its recent annual meeting held at Albany.

Dr. Harriet Watson Noble, of Albion, N. Y., has been appointed resident physician at the Western House of Refuge for Women, which is located in that village.

Dr. V. M. Griswold, U. of B. '80, who has resided and practised medicine for many years at Fredonia, N. Y., has removed to Westerly, Rhode Island.

Dr. Julius Ullman, of Buffalo, has been appointed physician to Buffalo University Dispensary in the department of internal medicine.

Dr. and Mrs. Matthew D. Mann, of Allen street, entertained a group of physicians at dinner just before the Lenten season began.

Dr. O. C. Shaw, U. of B. '73, has removed from Hamburg, N. Y., to Cassadaga, N. Y.

OBITUARY NOTES.

Dr. Henry Nichell, U. of B. 1857, died at his residence, 27 Day's Park, Buffalo, Thursday, February 14, 1901, in the eightieth year of his age. Dr. Nichell was well known especially to the older residents of this city as a conscientious physician and kind-hearted man.

Dr. Henry J. Herrick, a widely known physician and surgeon, of Cleveland, Ohio, died January 28, 1901. He was for many years professor of the medical department of the Western Reserve University. He was a companion of the Military Order of the Loyal Legion, and served as surgeon-general of the Ohio National Guard during Governor Foraker's administration.

Dr. Corydon J. Phillips, of Jamestown, N.Y., died at his home in that city, February 8, 1901, aged 60 years. He was an eclectic physician and a veteran of the civil war.

Dr. Henry Clay Hill, of Lockport, died at his home in that city February 8, 1901, aged 68 years. He was a graduate of the University of Michigan in 1859, and served as assistant surgeon from September 10 to December 3, 1862, in Colonel Peter A. Porter's regiment, the 129th New York Volunteers, afterward the 8th New York Heavy Artillery. Dr. Hill located at Lockport in 1877, and continued to reside there until his death.

Dr. Hiram Christopher, of St. Joseph, Mo., editor of the *Medical Herald*, died at his home January 31, 1901, aged 81 years. Dr. Christopher was a man of accomplishment and his influence in journalistic and professional circles was exercised in the direction of improvement.

SOCIETY MEETINGS.

The Third Pan-American Medical Congress was held at Havana, February 4-8, 1901, under the presidency of Dr. Juan Santos Fernandez, of Havana. Governor-General Wood welcomed the congress in appropriate terms at the Tacon Theatre, February 4th, in the presence of a brilliant audience. About 400 members were in attendance at the sessions, 100 of whom were from the United States. The Congress seems to have been a scientific success. The next meeting will be held at Buenos Aires in 1903.

The Niagara Falls Academy of Medicine held its regular meeting at the office of Dr. C. G. Leo-Wolf, Monday evening, February 4, 1901, at which time Dr. J. H. Miller read a paper on Fever, its cause and treatment.

The American Congress of Tuberculosis will hold its second annual meeting at the Grand Central Palace, in the City of New York, on the 15th and 16th days of May, 1901, in joint session with the Medico-Legal Society of New York.

THE Buffalo Academy of Medicine held meetings during the month of February, 1901, as follows:

> *Section on Surgery.*—Tuesday evening, February 5th. Program: Conservative surgery of the extremity, Chauncey Pelton Smith. Surgical complications of typhoid fever, Vertner Kenerson. Operative treatment of tubercular lymphomata of the neck, Prescott LeBreton.
>
> *Section on Medicine.*—Tuesday evening, February 12th. Program: The value of clinical pathology, A. E. Woehnert; Pemphigus, with the record of a case, J. W. Grosvenor; discussion by Grover Wende. Report of a case of psychical equivalent of epilepsy, Charles Cary and Julius Ullman.
>
> *Section on Ophthalmology, Otology, Rhinology and Laryngology.*—Monday evening, February 18th. Program: Presentation of a case—macular choroiditis, with cholesterin crystals, J. C. Clemesha; The eye in nervous diseases, W. C. Krauss; Certain diseases of the eye benefited by treatment of the nose and naso-pharynx, B. H. Grove.
>
> *Section on Pathology.*—Tuesday evening, February 19. Program: Leukemia, Chas. S. Jewett. House distribution of cancer in Buffalo during the past twenty years, Irving P. Lyon. Formaldehyde gas—its most simple application and its limitation in household disinfection, William G. Bissell.
>
> *Section on Obstetrics.*—Tuesday evening, February 26th. Program: The toxemia of pregnancy, M. A. Crockett; Symphysiotomy, P. W. VanPeyma.

THE Society of Physicians of Canandaigua has issued its program for 1901, which is as follows:

February 7th, A. L. Beahan, Diagnosis of right side abdominal disease; March 7th, O. J. Hallenbeck, Spinal Curvature; April 4th, W. B. Clapper, Tetanus with report of three cases; May 2d, J. H. Jewett; June 6th, J. H. Pratt, Chronic gonorrheal inflammation of the uterine appendages; September 5th, D. A. Eiseline, Rheumatic myocarditis; October 3d, D. R. Burrell, Mental derangement in lower animals; November 7th, F. E. McClellan, Prevention and management of infection of the breast during lactation; December 5th, H. C. Buell, A low specific gravity.

At the annual meeting January 2, 1902, the subject of the address by the retiring president, Dr. M. R. Carson, will be The care of feeble children.

The officers are: President, M. R. Carson; vice-president, A. L. Beahan; secretary and treasurer, H. C. Buell.

THE Western Ophthalmologic and Oto-laryngologic Association will meet in its next annual session at Cincinnati, Ohio, April 11 and 12, 1901. Dr. C. R. Holmes, of Cincinnati, is chairman of the local committee of arrangements. Dr. M. A. Goldstein, of St. Louis, is the president, and Dr. W. L. Ballenger, of Chicago, is the secretary.

COLLEGE AND HOSPITAL NOTES.

BRIGHAM HALL, a hospital for mental and nervous diseases, located at Canandaigua, N. Y., is one of the most successful and best managed private institutions in the country for the treatment of mental and nervous diseases. It was established in 1855 by Dr. George Cook, who associated with himself Dr. John B. Chapin, and it is now in charge of Dr. D. R. Burrell. It will be observed, therefore, that it has commanded from its beginning the ablest medical talent in this department of medicine. The buildings, which are of the best class, are beautifully located in one of the most charming regions of the state—a commonwealth abounding in attractive scenery. A handsome booklet is issued by the hospital, which is profusely illustrated.

THE University of Pennsylvania has recently issued the Provost's report for the year ending August 31, 1900. It constitutes University Bulletin, No. 2, New Series, contains 250 standard octavo pages and is replete with valuable information. It is a document of interest to educators and bespeaks the progress making in all departments of the great University.

THE Charity Eye, Ear and Throat Hospital, located at 166 Broadway, Buffalo, has recently sent out its ninth annual report. During the year ending September 30, 1900, 1983 new cases were treated and 9,671 visits of patients were made to the dispensary, while 21 were received into the hospital. The total cost of maintenance was about $1,900--a most economic exhibition for the amount of excellent work performed.

THE Laboratory of Pathology of the University of Buffalo has recently published a report covering the year 1900, which is entitled, Bulletin No. 1. It consists for the most part of reprints of papers published in different medical journals by the laboratory workers. The bulletin has been prepared under the direction of Dr. Herbert U. Williams, director of the laboratory. It contains numerous excellent illustrations, besides material of great interest.

Book Reviews.

SEXUAL DEBILITY IN MAN. By FREDERIC R. STURGIS, M. D., formerly Clinical Professor of Venereal Diseases, Medical Department, University of the City of New York; Ex-Visiting Surgeon to the City Hospital, Blackwell's Island; author of "A Manual of Venereal Diseases;" one of the authors of "A System of Legal Medicine," etc. Small 8vo, pp. 432. Illustrated. New York: E. B. Treat & Co. 1900 [Price, $3.00]

This work in contradistinction to others of a similar kind deals only with sexual diseases in the male, the first three chapters being devoted to the physiology of the sexual organs.

The chapter on masturbation should be read carefully by every conscientious physician. In his statement of causes of the nervous phenomena accompanying this condition, Sturgis has failed to mention possibly the most important and to the reviewer the very thing that is liable to bring about derangement of the mental faculties in one who has inherited a weakened, degenerated nervous system. We refer to the quack literature that is today flooding the country, every sentence teeming with suggestions of the madhouse and other horrible endings.

One of the most valuable suggestions as a cure is the advice to use hypnotism, for nothing can be imagined of a easier nature than to produce the hypnotic state in some, if not all, who practise masturbation beyond a certain time. If inquiry is made it is usually found that in patients a slave to this form of amusement, father, mother or grandparents have suffered, or at present are sufferers from some marked degenerated condition of the nervous system, possibly some of the family being confined in a madhouse. Is it folly to suppose that the offspring of such parents would have any other than a weakened nervous system which could be easily swayed to right or wrong, especially toward the latter? The author makes no specific mention of drug treatment for these patients. This is a sad omission, for with these individuals most gratifying results are obtained from medication in the shape of tonics.

Sturgis must be most seriously disagreed with when he infers that onanism, practised even in moderation, is not followed by some bad results, and this in the absence of any inflammatory condition of the parts (sexual apparatus), either simple or specific.

Where treatment is called for, after the stoppage of the habit, it is pleasing to hear the author advise silver in weak solutions, for there is no doubt that this drug is called for in the treatment of pathological conditions of the urethral membrane, due to the practice of onanism; the condition is often prolonged solely by the use of argentum in strong solutions.

Sturgis very pointedly declares there is no connection between nocturnal emissions and spermatorrhea, *i. e.*, although spermatorrhea occasionally follows in the wake of emissions, it does not depend upon the former nocturnal emissions as its starting point. He must be disagreed with most emphatically when he states, "almost all cases of genuine spermatorrhea occur without any antecedent nocturnal or diurnal pollutions." To a certain extent he may be right, but from most careful questioning in a large number of cases of this description, nightly emissions have usually been found to precede the loss of semen without the patient's knowledge—erections, sensation, and the like. The very thing he states, insufficiency of the ejaculatory duct being necessary to true spermatorrhea, is to the reviewer the exact condition that is developed by frequent emissions. A case under treatment now, we are sure, goes a long way to prove this; gonorrhea first and only time two years ago, this followed by frequent nocturnal emissions, which gradually diminished, but as they became less, a whitish substance was seen at the meatus during the day, especially after the bowels moved. Examination proved this to be seminal fluid.

As the latter condition became well established, nocturnal pollutions ceased altogether, the other continuing until relieved by treatment. Although this patient is 35 years old, nothing was ever seen at the meatus previous to the commencement of emissions. There was no history of excessive masturbation nor had he ever suffered before from nightly losses. It must not be inferred that the reviewer claims that all cases are a sequence of emissions, for cases are often seen where eliminating the occasional emission of a healthy man, this disease is found developed in marked form. Although the author does not express himself very clearly, we do not believe that spermatorrhea can be considered a disease, *per se*, any more than can be jaundice, vomiting or coughing; but rather that it is only a symptom of some pathological condition. As to the mental disturbances and alienations produced in patients through pollutions, the author cannot be too heartily agreed with in his opinion, that where such take place, the inherited tendencies, etc., must be taken into consideration.

It can safely be asserted that individuals suffering to any extent from mental disturbances due to pollutions, are the offspring of parents who have transmitted to them weakened nervous systems, or weakened mental faculties to an extent that they are easily swayed. When such occurs it is generally the result of the reading of quack literature —a cause which Sturgis should have mentioned.

In considering the treatment of emissions, the reviewer must consider it an unconscious omission on the part of the author, to have failed to mention the steel sound in the care of this trouble. Surely, no one who has had any experience in the treatment of pollutions, either diurnal or nocturnal, can fail to recognise the great benefit received from the sound.

To sexual impotence 191 pages are given up, a large portion of the space being devoted to the citation of cases coming under the heading of that form termed psychical. Most of the histories given appear in works of this or a similar kind and are very interesting reading: not that any knowledge can be gained therefrom, but they go a long way toward proving a statement once made: "everybody is crazy on some one subject." Surely, any one reading the doings of the patients referred to must form but one conclusion, namely, that they are insane; and furthermore they should not be allowed to roam at large, but should be confined until their brains become balanced. Here, as in the treatment of emissions, Sturgis has failed to mention the sound, undoubtedly the most valuable aid in treating that form, the most common variety,—irritative,—due to a hyperesthesia of the posterior urethra. This is a serious oversight, if such it is, for there is no doubt that the sound exerts a more powerful influence on the deep urethral tissues than would a barrel of medicine. Sturgis impresses one with his firm convictions, and it must be said, with a few exceptions, they are good common sense opinions and should receive the credit due them.

The volume should be in the hands of every practitioner of medicine who should carefully read and carry into practice the author's ideas, for only by so doing can any young men be saved who are being treated at the hands of charlatans.—J. H. D.

DUNGLISON'S DICTIONARY OF MEDICAL SCIENCE. Containing a full explanation of the various subjects and terms of Anatomy, Physiology, Medical Chemistry, Pharmacy, Pharmacology, Therapeutics, Medicine, Hygiene, Dietetics, Pathology, Surgery, Ophthalmology, Otology, Laryngology, Dermatology, Gynecology, Obstetrics, Pediatrics, Medical Jurisprudence, Dentistry, Veterinary Science, etc., etc. By ROBLEY DUNGLISON, M. D., LL. D., late Professor of the Institutes of Medicine in the Jefferson Medical College of Philadelphia. Edited by Richard J. Dunglison, A. M., M. D. New (22d) edition, thoroughly revised, greatly enlarged and improved, with the pronunciation, accentuation and derivation of the terms. In one imperial octavo volume of 1350 pages. Lea Brothers & Co., Philadelphia and New York. 1900. [Cloth, $7.00, net; full leather, $8.00 net.]

Dunglison's Medical Dictionary has again been revised and brought thoroughly to the latest date, with an appendix containing no less than 160 pages and 15,000 new words. The immense growth of medical terms and the necessity of an accurate knowledge of them is becoming increasingly important. For two generations Dunglison has been by common consent the standard authority. It has been used by tens of thousands of students in all English-speaking countries, and equally by practitioners. In the several revisions of the past decade about 65,000 new terms have been added, so that this standard authority may always be confidently consulted for the latest words.

All departments of medicine are represented, including veterinary and dental science, so that it is more complete and comprehensive than ever, and therefore liable to become more popular, if such a thing is possible. Many tables are incorporated in this edition, also much general information not usually found in medical dictionaries; for instance, the table of half-breeds, that on man, hair and so on, which are extremely interesting. The portrait of Robley Dunglison is a welcome addition, and the present author is to be thanked for giving the profession a chance to see the kindly face of the founder of this dictionary. In its new form it will creditably retain the position it has long held, as the authoritative lexicon of the medical sciences. It is heavily bound in leather, with a firm back and able to withstand good hard usage.—W. C. K.

THERAPEUTICS: ITS PRINCIPLES AND PRACTICE. By HORATIO C. WOOD, M.D., L.L. D., Professor of Materia Medica and Therapeutics, and Clinical Professor of Diseases of the Nervous System in the University of Pennsylvania; and Horatio C. Wood, Jr., M. D., Demonstrator of Pharmacodynamics in the University of Pennsylvania. Octavo, pp. xxxiii. - 850. Eleventh edition, remodeled and in greater part rewritten. Philadelphia and London: J. B. Lippincott Co. 1900.

During the past twenty-five years Wood's treatise on therapeutics has enjoyed the confidence of the medical profession, both at home and abroad. When the first edition appeared it was believed to be the first book in any language, and known to be the first in the English language, to make the physiological study of drugs the essential of practical therapeutic teaching. Nearly every work that has appeared since 1875 has been written upon the same basis.

In the ten editions that have already appeared, whatever of progress which has occurred between each has been carefully noted, so that taking the work as a whole from its first edition to its last it has not only kept abreast of the periods of its issuance, but in a certain sense and in some respects it has been in advance of accepted teachings.

Some changes have been made in the present edition consisting chiefly in condensing certain portions of the work, in eliminating others, in a careful selection of language with a view to obtain conciseness but not to sacrifice clearness, and in adding articles on a number of new drugs. The author's son, Dr. Horatio C. Wood, Jr., has been associated with him in the revision of this treatise, which shows everywhere careful work by master hands. We have heretofore had occasion to speak in terms of commendation of this work and we now reaffirm our previously expressed opinions with compound interest.

A TEXT-BOOK OF THE DISEASES OF WOMEN. By HENRY J. GARRIGUES, A. M., M. D., Gynecologist to St. Mark's Hospital, New York City. Octavo volume of 756 pages, with 367 illustrations. Third edition, thoroughly revised. Philadelphia and London: W. B. Saunders & Co. 1900. [Price, cloth, $4.50 net; sheep or half Morocco, $5.50 net.]

The author of this treatise has been long known to the profession of medicine as one of the most painstaking gynecological teachers. His text-book, therefore, was well received when it first appeared, not only by the medical press, but by teachers and practitioners of medicine throughout the country; hence, it is not surprising that the earlier editions promptly became exhausted.

The demand for the third edition has enabled the author to revise the entire work in a thorough-going manner, bringing its teaching down to the immediate present. All this has been done in the most conscientious way, so that the present volume represents the gynecologic practice of today quite as completely as any of its contemporaries in this field of medicine. Whatever has ceased to be of importance has been eliminated and much new material in text and illustrations has been added. One of the chief advantages of this text-book is its eminently practical character. It, therefore, appeals to student and practitioner alike as a safe guide in the amphitheater or library. Moreover, the simplicity and directness of its language make it one of the most valuable text-books for beginners that has yet appeared. It is not overloaded with theoretical discussions, but it is strong in pathology, diagnosis and treatment. We most heartily commend it to student and general practitioner.

PROGRESSIVE MEDICINE. Volume IV. 1900. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, handsomely bound in cloth, 428 pages, 69 illustrations. Philadelphia and New York: Lea Brothers & Co. [Per annum, in four cloth-bound volumes, $10.00.]

The contents of this volume includes articles as follows: Diseases of the Digestive Tract and Allied Organs, the Liver, Pancreas and Peritoneum, by Max Einhorn; Genito-urinary Diseases and Syphilis, by William T. Belfield; Fractures, Dislocations, Amputations, Surgery of the Extremities, Orthopedics, by Joseph C. Bloodgood; Diseases of the kidneys, by John Rose Bradford; Physiology, by Albert P. Brubaker; Hygiène, by Henry B. Baker, and Practical therapeutic referendum, by E. Q. Thornton.

In Einhorn's article the latest methods of medicating the stomach will be found recorded, as well as many valuable hints on medical diagnosis and treatment. Bloodgood's article is most instructive, and among other things, he devotes considerable space to gonorrheal arthritis. The therapeutic referendum is much enlarged. Dr. Baker's article is a practical one, dealing with the causation of diseases due to toxins, their modes of communication and methods of control.

This is one of the most useful volumes of this very excellent series. The book is well illustrated, its letter press is clear and distinct, while its general make-up is attractive.

A TEXT-BOOK OF HISTOLOGY, INCLUDING MICROSCOPIC TECHNIC. By A. A. BÖHM, M. D., and M. VON DAVIDOFF, M. D., of the Anatomical Institute in Munich. Edited, with extensive additions to both text and illustrations, by G. Carl Huber, M. D., Junior Professor of Anatomy and Director of the Histological Laboratory, University of Michigan. Authorised translation from the second revised German edition, by Herbert H. Cushing, M. D., Demonstrator of Histology and Embryology, Jefferson Medical College, Philadelphia. Octavo, pp. 501, 351 illustrations. Philadelphia and London: W. B. Saunders & Co. 1900. [Price, $3.50 net.]

This is the first American from the second German edition and presents in an approved fashion, the fascinating study of intimate structure of the tissues of the body. Beginning with an introductory chapter on microscopic technic, the author passes to the consideration of general histology in which he first treats of the cell and then of the tissues. In this way the first 164 pages of the book are utilised. In the second section of the treatise special histology is taken up and is considered under the following separate heads: I. Blood and blood-forming organs, heart, bloodvessels, and lymphvessels; II. Circulatory system; III. Digestive organs; IV. Organs of respiration; V. Genito-urinary organs; VI. The skin and its appendages; VII. The central nervous system; VIII. Eye; IX. Organ of hearing; X. Organ of smell, and XI. General considerations of the special sense organs.

From this it will be observed that the scheme and scope of the work is based upon modern teaching and research. It may be added, also, that it is exhaustive without being tedious, that it is concise without doing violence to essentials, and, in short, is one of the best text-books on histology for students and investigators, as well as teachers, that recently has appeared. The illustrations are especially worthy of note and the translator has preserved, to a remarkable degree, the original ideas of the author and at the same time given us smooth-reading English. The American editor has added notes here and there, where necessary, to make the work conform to the present teaching in American laboratories. It is a text-book deserving of warmest commendation.

PHYSICAL DIAGNOSIS OF DISEASES OF THE CHEST. By RICHARD C. CABOT, M. D., Physician to Out-patients, Massachusetts General Hospital; Assistant in Clinical Medicine, Harvard Medical College. Octavo, pp. xv.—310. 142 illustrations. New York: William Wood & Co. 1900. [Price, $2.50.]

The author of this excellent book modestly announces that it is intended for students and, so far as he is aware, contains nothing original. He further states that he has written it because he has not been able to find any small work upon the subjects that does not contain glaring errors, the correct books being too large and the small ones are out of date. This is an argumentum ad judicium, and is ample reason for the appearance of the work. There is room for it; it is well written; the author knows his subject; he imparts his knowledge clearly,—and this is more than can be said of every medical book published nowadays.

There is no more important study, after the fundamentals, than that of diagnosis. The subtleties of disease that lurk within the cavity of the chest give forth a correct interpretation only to the trained eye, ear and touch. This work by Cabot, unless we are very greatly in error, will do much toward clearing up doubtful sounds from heart or lungs that have either been little understood or greatly misunderstood.

Austin Flint was one of the first American physicians to point out the importance of properly differentiating râles, friction sounds and murmurs, and to properly teach his pupils how to estimate their true value and significance. Cabot has taken up the work where Flint left it and has refined it beyond any teacher of the present day. His chapter on valvular lesions is altogether the finest bit of teaching on the subject we have ever seen, whether in text or illustration, and ought to be carefully studied by every physician. There are other chapters, especially the one upon auscultation, which might similarly be commended. Indeed, the book, as a whole, merits approbation and especially do its illustrations deserve praise. No intelligent student of diseases of the chest, whether undergraduate or practitioner of medicine, can afford to deny himself the possession of this book.

APPENDICITIS AND ITS SURGICAL TREATMENT. With a Report of 185 Operated Cases. By HERMAN MYNTER, M. D., Professor of Clinical Surgery in University of Buffalo, Buffalo, N. Y. Duodecimo, pp. 231. Third revised edition. Philadelphia: J. B. Lippincott Co. 1900. [Price, $2.00.]

When the first edition of this treatise was received the JOURNAL reviewed it in extenso, expressing an opinion upon the several points of importance made by the author in his consideration of the subject. The second edition was partly destroyed by fire when the Lippincott house was burned in 1899, hence the JOURNAL did not receive a copy.

In the third edition the general plan of the book has not been changed, except to omit the histories, which has very much reduced it in size. Instead of the histories of cases, which comprised such a large portion of the first edition, in this they have been classified according to their different clinical forms. The work is a valuable contribution to the literature of appendicitis and presents the strongest arguments on the surgical side of the question. There is constantly less reason for regarding this as a medical disease and, with accumulated experience, there is constantly more reason for regarding it as a surgical malady. Every surgeon will appreciate this book because of the strong personality of the writer and the stand he takes with reference to early operation.

A MANUAL OF MATERIA MEDICA AND PHARMACOLOGY. Comprising all Organic and Inorganic Drugs, which are and have been official in the United States Pharmacopœia, together with important allied species and useful synthetics. For students of medicine, druggists, pharmacists and physicians. By DAVID M. R. CULBRETH, M. D., Professor of Botany, Materia Medica and Pharmacognosy in the Maryland College of Pharmacy, Baltimore. New (2d) edition. In one 8vo volume of 881 pages, with 464 illustrations. Philadelphia and New York: Lea Brothers & Co., Publishers. 1900. [Cloth, $4.50 net]

This treatise attracted marked attention when its first edition appeared in 1896. It was adopted as a text-book by many of the colleges and has steadily kept favor with the profession. Among its advantages may be enumerated its convenient size, the vast information it contains, the clearness with which it is presented and the original methods adopted with reference to the order of the arrangement.

In this edition the general scope of the work remains practically the same; the author's aim to keep the basal or parental source paramount and to associate in regular order those substances which have a common or allied origin, has been adhered to. Again, the latest approved remedies are recorded, a more detailed statement of the physiological action of leading drugs is given, a more comprehensive account of poisons is presented and several other changes have been made, including a number of new illustrations, which serve to keep the work in the front rank of progress. It is a treatise that both students and teachers cannot fail to appreciate, because it easily takes rank among the best of its kind and is well adapted for use in the laboratory, class room and library.

A POCKET TEXT-BOOK OF DISEASES OF THE EYE, EAR, NOSE AND THROAT, for Students and Practitioners. By WILLIAM L. BALLENGER, M. D., Assistant Professor of Otology, Rhinology and Laryngology in the College of Physicians and Surgeons, Chicago, etc, and A. G. Wippern, M. D., Professor of Ophthalmology and Otology in the Chicago Eye, Ear, Nose and Throat College. Duodecimo, 525 pages, with 150 engravings and six full-page colored plates Philadelphia and New York: Lea Brothers & Co. 1900. [Price, cloth, $2.00 net; flexible red leather, $2.50 net.]

This is a practical work, treating of diseases of the eye, ear, nose and throat. It is abundantly illustrated, possessing advantages for students and general practitioners, as diseases of these organs are among the most common conditions which medical men are called upon to handle.

The book reflects the most advanced state of its subjects, both in theory and practice, in diagnosis and treatment. The nomenclature of diseases of the eye is much less complex than in the ordinary textbook, while those diseases of the organ which the general practitioner is expected to deal with, are fully described.

In the section on the ear the physiologic tests of hearing are given considerable prominence. Suppurative diseases of the middle-ear and mastoid are fully described. The mastoid operation is dwelt upon with marked detail, each step being given which will interest the experienced aurist.

Obstructed nasal respiration is fully described in its etiological relation to many nasal and naso-pharyngeal diseases. The symptoms of suppurative diseases of the accessory sinuses of the nose are explained from their anatomical relations to each other, and to the turbinated bones. The section on diseases of the throat is concise but not exhaustive.—W. S. R.

MODERN SURGERY. General and Operative. By JOHN CHAMBERS DACOSTA, M. D., Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College, Philadelphia; Surgeon to the Philadelphia Hospital and to St. Joseph's Hospital, Philadelphia. Octavo, pp. 1117. With 493 illustrations. Third edition, revised and enlarged. Philadelphia and London: W. B. Saunders & Co. 1900. [Price, cloth, $5.50 net; half morocco, $6.00.]

The general plan of this work, as established in its first edition, is still adhered to. This, in brief, is a presentation of the fundamental principles of surgery, together with a description of its chief operations and the most accepted methods of surgical technique. To facilitate this plan special surgery, such as pertains to ophthalmology, gynecology, etc., has not been considered. These have been left to the several special treatises, which is a most wise arrangement.

Taking advantage of the opportunity the author has made important additions to the work, such, for instance, as have grown out of improvements in surgical science, better methods of teaching, or the just criticisms of reviewers. Separately considered, each of these would have required but comparatively few changes, yet in the aggregate they have rendered necessary the addition of much new material. To meet this demand some obsolete matter has been eliminated, leaving the general size of the volume quite the same. Its simplicity and directness appeal to student and practitioner of medicine, who may herein find a safe guide to the proper diagnosis and management of surgical accidents and injuries.

A TEXT-BOOK OF PATHOLOGY. By ALFRED STENGEL, M. D., Professor of Clinical Medicine in the University of Pennsylvania; Physician to the Philadelphia Hospital; Physician to the Children's Hospital, Philadelphia, etc. Octavo, pp. 873, with 372 illustrations. Third edition, revised. Philadelphia and London: W. B. Saunders & Co. 1900. [Price, cloth, $5.00 net; half morocco, $6.00 net.]

The first edition of Stengel's pathology was reviewed in the July number, 1899, of the JOURNAL, and its many excellent points of superiority there noted. The third edition being demanded in the short space of two years, is but an indication that it has found great favor among the medical colleges and the profession at large. The present edition has been somewhat enlarged, and revised with the intention of bringing the subject-matter up-to-date and of amplifying the sections on pathologic physiology. The general arrangement of the subject-matter remain practically the same as in the preceding editions. The chapter on the pathology of the nervous system has been thoroughly revised and for this purpose the author has obtained the valuable services of Dr. Joseph Sailer, of Philadelphia, who has succeeded admirably in the difficult field of pathology.

The binding and press-work are similar to the preceding edition.

W. C. K.

THE AMERICAN YEAR-BOOK OF MEDICINE AND SURGERY FOR 1901. A Yearly Digest of Scientific Progress and Authoritative Opinion in all Branches of Medicine and Surgery, drawn from journals, monographs and text-books of the leading American and foreign authors and investigators. Arranged with critical editorial comments, by eminent American specialists. In two volumes—Volume I, including *General Medicine*, Octavo, 681 pages, illustrated; Volume II, *General Surgery*, Octavo, 610 pages, illustrated. Philadelphia and London: W. B. Saunders & Co. 1901. [Per volume: Cloth, $3.00 net; half morocco, $3.75 net.]

This excellent year-book is again issued in two volumes as was done last year—one pertaining to medicine and the other to surgery. This arrangement has the advantage of convenience on the one hand

and permits those who want the medical or surgical volume alone to obtain either without the increased expense of buying the other.

The arrangement of the volumes is excellent, the material is good, and the letter press superb. In the surgical volume we think it would be well to introduce illustrations more copiously, as these go a long way toward popularising such a work. We regard this as one of the best of the annual digests of medical literature.

A TEXT-BOOK OF THE PRACTICE OF MEDICINE. By JAMES M. ANDERS, M.D., Ph. D., LL. D., Professor of the Practice of Medicine and of Clinical Medicine in the Medico-Chirurgical College, Philadelphia; Attending Physician to the Medico-Chirurgical and Samaritan Hospitals, Philadelphia. Octavo, pp. 1263. Illustrated. Fourth edition, thoroughly revised. Philadelphia and London: W. B. Saunders & Co. 1900. [Price, cloth, $5.00 net; sheep and half morocco, $6.50.]

It is but a year since we presented a notice of the third edition of this text-book. The several editions have been exhausted with such remarkable rapidity that it leaves but little for the author to do between the disappearance of one and the demand for the next, except to modify the text here and there and to make the few additions that are necessary to keep it abreast of the date of issue.

Diseases of the digestive system have received additions and a number of subjects have been rewritten. The book remains substantially the same in size and is still one of the best treatises on the practice of medicine of recent issue.

AN AMERICAN TEXT-BOOK OF PHYSIOLOGY. By Ten of the Leading Physiologists of America. Edited by WILLIAM H. HOWELL, Ph. D., M. D., Professor of Physiology in the Johns Hopkins University, Baltimore. Octavo, 1052 pages. Illustrated. Second edition, revised. Volume I. Philadelphia: W. B. Saunders & Co. 1900. [Price, cloth, $6 00 net; sheep or half Morocco, $7.00 net.

The American Text-Book of Physiology first appeared in 1896. It took rank at once as a standard if, indeed, not the leading American work on this subject. The second edition has been most carefully revised. Not only has new matter been incorporated with the text wherever such changes are called for, but statements and theories which time has proven wrong or impossible have been eliminated. Among additions to the first volume is to be noted an especially interesting section upon the modern view of the processes of osmosis and diffusion. Whoever uses the work will appreciate the advantage of two easily handled volumes over one so large as to be cumbersome.

M. J. F.

A MANUAL OF HYGIENE AND SANITATION. By SENECA EGBERT, A. M., M. D., Professor of Hygiene in the Medico-Chirurgical College of Philadelphia. New (2d) and revised edition. In one 12mo volume of 427 pages, with 77 engravings. Philadelphia and New York: Lea Brothers & Co. 1900. [Price, cloth, $2.25 net.]

The appearance of a second edition of Egbert's work on Hygiene and sanitation proves the value of the book and the widespread interest taken by the profession on this subject. So plain and untechnical is the writer's style that the lay reader, as well as student and practitioner, can find a horde of vitally interesting facts between the two covers. Nothing is more vital at the present time than the study of pure water, school sanitation, the sewage problem, disinfection and quarantine, and these are the subjects which the author discusses so thoroughly and entertainingly. In this edition the author has added a chapter on military hygiene, quoting at some length the admirable paper of Prof. Victor C. Vaughan on State Medicine, before the last meeting of the American Medical Association. The statement is made that "every regiment in the United States service in 1898 developed typhoid fever." The advisability of adding a chapter on this subject is therefore very apparent.

In every detail the work will be found a clear, comprehensive and authoritative exposition of its subject. W. C. K.

NINETEENTH ANNUAL REPORT OF THE STATE BOARD OF HEALTH OF NEW YORK. Transmitted to the Legislature February 13, 1899. With accompanying maps. New York and Albany. 1900.

After an existence of twenty-one years the State Board of Health has been abolished in accordance with the recommendation of the governor, and a single commissioner appointed instead thereof, at an annual salary of $3,500. The State of New York, which should be first in everything that relates to the welfare of its citizens, has by this inexplicable action of its executive and legislative branches of the government turned back the wheels of progress for an unlimited period of time.

All interested in state medicine, public sanitation and general hygiene will be curious to learn what class of man who, is to act as expert in all these matters, can be obtained for the meager salary offered. From this action of the state government we presume that this will be the last report by the State Board of Health. These reports are two years behind—a tardiness that ought to have been remedied long ago.

REPORT OF THE COMMISSIONER OF EDUCATION FOR THE YEAR 1898-99. Volumes I and II. Washington: Government Printing Office. 1900.

Volume I. is devoted principally to a consideration of the educational status in foreign countries. One chapter—XXII.—gives a list of confederate text-books in vogue from 1861 to 1865, which is amusing, to say the least. In it are given such titles as The Dixie Speller, The New Texas Spelling Book, The First Dixie Reader, The Southern Confederacy Arithmetic, The Louisiana English Grammar. The latter is "published by order of his excellency, Henry W. Allen, governor of Louisiana." One curious title is the Palmetto Dictionary. Among the extracts from some of these books we note the following: "This (United States) was once the most prosperous country in the world . . . The people are ingenious and enterprising and are noted for their tact in driving a bargain." Relating to the Southern Confederacy we note the following extract: "This is a great country. The Yankees thought to starve us out when they sent their ships to guard our seaport towns. . . . . The Southern people are noted for being high-minded and courteous."

TRANSACTIONS OF THE TEXAS STATE MEDICAL ASSOCIATION. Thirty-second Annual Session held at Waco, Texas, April 24-27, 1900. H. A. WEST, M.D., Secretary.

The book of annual transactions of the Texas State Medical Association always presents an excellent appearance in form and dress. This results from keeping an experienced secretary at the helm from year to year. An excellent feature of this number is a verbatim report of the proceedings, which takes up about 120 pages of the volume.

The association honored itself by electing Dr. B. E. Hadra to be president for the current year. Dr. Hadra is an experienced surgeon and an ornament to the profession of medicine. After the proceedings, a number of papers read at the meeting are published, which cover the several branches of medicine and surgery and furnish literature of interest.

A CLINICAL TREATISE ON FRACTURES By WILLIAM BARTON HOPKINS, M. D., Surgeon to the Pennsylvania Hospital and to the Orthopedic Hospital and Infirmary for Nervous Diseases. Octavo, pp. 268. Illustrated. Philadelphia: J. B. Lippincott Co. 1900.

The literature relating to the treatment of fractures has been enriched of late, by the publication of several new works devoted solely to that branch of surgery. This exclusively clinical treatise will take front rank in the class of literature referred to. It everywhere bears the imprint of careful study.

The author, himself, is a master of his subject and he has had great clinical experience at the Pennsylvania Hospital. He describes the injury and its management in each particular case in a concise manner, scarcely using a superfluous word. It is a work for the man of some experience rather than for the student. It is copiously illustrated with admirable skiagraphs and numerous other engravings, selected from the vast collection at the Pennsylvania Hospital and from the Mütter Museum of the College of Physicians.

It is printed on heavy plate paper, and is as handsome a specimen of book-making as has been seen in many a day.

BOOKS RECEIVED.

A Medico-Legal Manual. By William W. Keysor, Lecturer on Medical Jurisprudence in the Omaha Medical College and Judge of the District Court, Omaha, Nebraska. 12mo., pp. 316. Omaha: Burkley Printing Co. 1901. [Price, $2.00.]

A Text-Book on Practical Obstetrics. By Egbert H. Grandin, M. D., Gynecologist to the Columbus Hospital; Consulting Gynecologist to the French Hospital, etc. With the collaboration of George W. Jarman, M. D., Gynecologist to the Cancer Hospital. Third edition, revised and enlarged. Illustrated with 52 full-page photographic plates and 105 illustrations in the text. Pages xiv.—511. F. A. Davis Company, Philadelphia. 1901. [Price, cloth, $4.co, net; sheep, $4.75, net.]

Uterine Tumors; Their Pathology and Treatment. By W. Roger Williams, Fellow of the Royal College of Surgeons. 12mo., pp. 375. Illustrated. New York: William Wood & Company. 1901. [Price, $3.00 net.]

The Johns Hopkins Hospital Reports. Vol. VIII. Nos. 3-9. 1900.

Transactions of the Mississippi Valley Medical Association. Twenty-sixth annual session, held at Asheville, N. C., October 9, 10 and 11, 1900. Volume II. Henry E. Tuley, M. D., Secretary.

Fifteenth Annual Report of the State Board of Health and Vital Statistics of the Commonwealth of Pennsylvania. Vols. I. and II. 1899. Benjamin Lee, M. D., Secretary.

Obstetric and Gynecologic Nursing By E. P. Davis, A. M, M. D., Professor of Obstetrics in Jefferson Medical College and Philadelphia Polyclinic. 12mo, 402 pages, fully illustrated. Philadelphia and London: W. B. Saunders &, Co., 1901. [Price, $1 75, net.]

International Clinics. A Quarterly of Clinical Lectures and Especially Prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Pediatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose and Throat, etc. Edited by Henry W. Cattell, A M., M. D., of Philadelphia, with the collaboration of John B. Murphy, M. D., of Chicago; Alexander D. Blackader, M D, of Montreal; H. C. Wood, M. D., of Philadelphia; T. M. Rotch, M. D., of Boston; E Landolt, M. D., of Paris; Thomas G. Morton, M. D., and Charles H. Reed, M. D., of Philadelphia; J. W. Ballantyne, M. D., of Edinburgh, and John Harold, M. D., of London Volume IV Tenth series. 1901. Philadelphia: J B Lippincott Company.

A System of Practical Therapeutics By Eminent American and Foreign Authorities Edited by Hobart Amory Hare, M. D., Professor of Therapeutics, Jefferson Medical College; Physician to Jefferson College Hospital, etc, Philadelphia New (2d) edition, thoroughly revised In three handsome octavo volumes, containing 2593 pages, with 427 engravings and 26 full-page colored plates. Lea Brothers & Co.: Philadelphia and New York 1901. [Price, per volume, cloth, $5.co, net; leather, $6 00, net; half morocco. $7.00, net]

LITERARY NOTES.

THE Texas *Medical Gazette* made its appearance in January of the present year. It is printed at Fort Worth, and edited by Drs. F. D. Thompson, Bacon Saunders, Frank Gray and W. R. Thompson. The first number contains considerable interesting original material, besides a number of editorials on current topics.

The Stylus has been consolidated with the *Interstate Medical Journal* and the two publications continued under the latter name. Dr. William Porter, formerly editor of *The Stylus*, will be associated with Drs. W. B. Outten, R. B. H. Gradwohl and O. F. Ball, in the editorial management of the *Interstate Medical Journal*, St. Louis, Mo.

American Medicine, the new weekly projected and promoted by Dr. George M. Gould, who was so forcibly and suddenly ejected from the Philadelphia *Medical Journal* a few weeks ago, will make its appearance either late in March or early in April at farthest. It has already taken solid financial footing, and it goes without saying that its editorial side with Dr. Gould at the head will be of the best. We have no doubt this new journalistic enterprise will prove an ornament to American periodical literature, as well as a profitable enterprise for its owners.

PRIZE ESSAY ON THE DANGERS FROM QUACKERY.—The Colorado State Medical Society offers a prize of $25.00 for the best essay, if deemed worthy of the prize, pointing out the dangers to public health and morals, especially to young persons, from quackery as promulgated by public advertisements.

The competition is open to all. Essays must be typewritten in the English language, and submitted before May 15, 1901. Each essay must be designated by a motto and accompanied by a sealed envelope, bearing the same motto, and enclosing the name and address of the author. The essay receiving the prize will become the property of the society for publication. Others will be returned on application. Essays should be sent to the Literature Committee. Room 315 McPhee Building, Denver, Colorado.

THE Pan-American Exposition Company, through its Bureau of Publicity, has just issued another beautiful booklet, illustrating some of the many interesting features that are planning for the instruction and amusement of the visitors. It consists of 16 pages covered in light green with a unique miniature reproduction of the famous poster, "The Spirit of Niagara." It is a beautiful picture-book containing fine views of all the principal buildings and giving many scenes that will take place during the exhibition.

Among other things the center of the booklet shows a birdseye view of the exposition, and gives one some idea of the great extent of the enterprise upon which about $10,000,000 is being expended. The grounds contain 350 acres, being half a mile wide, and a mile and a quarter long. Other pages show horticulture, graphic arts and mines, manufactures and liberal arts, the music temple, the plaza and its beautiful surroundings, the stadium or athletic field, the agricultural, live stock and ethnology features, and a few of the thirty or forty ingenious and novel exhibits, which promise to make the midway the most wonderful that has ever been prepared for exposition visitors. The last page shows a ground plan of the exposition, whereon the location of different buildings is indicated. The railroads will make low rates from all parts of the country during the exposition, which opens May 1, 1901, and continues six months. As the date approaches the interest in the fair increases, and it has already grown in scope and size beyond the original plans of its projectors. The people of Buffalo are preparing to entertain comfortably the millions who will attend. Anyone desiring a copy of this booklet may have it free by addressing the Pan-American Bureau of Publicity.

MISCELLANY.

THE Surgeon-General, U. S. Army, announces that as a result of the reorganisation of the army by act of congress, approved February 2, 1901, there are 129 original vacancies as assistant surgeon to be filled.

The prescribed age limit of candidates will be rigidly adhered to and it will be useless for those who are more than twenty-nine years of age to apply, unless they have had previous service, as mentioned in the circular. The requirement of hospital experience or its equivalent in private practice will also be insisted upon. Hospital work as a student will not be regarded as fulfilling this requirement; experience as a physician after graduation is what is meant. Two years of private practice will be considered an equivalent of one year's hospital experience.

Army Medical Boards will be convened at an early day in Washington and in San Francisco, and examinations will be begun as soon as possible. Copies of a circular, giving adequate information to candidates may be obtained upon application to the Surgeon-General, U. S. Army, Washington, D.C.

THE New York Pharmacal Association, the makers of lactopeptine, liquid peptonoids and hemaboloids are engaged in compiling and arranging a 64-page book, entitled Facts and Figures, Medical and otherwise, from the Census of 1900 and other reliable sources. Fully one-half of this volume (32 pages) is made of full-page colored lithographic maps and schematic diagrams, illustrating in a thoroughly clear, concise and graphic manner the most interesting and important subject matter.

Besides much interesting and important statistics thus graphically illustrated of a general character, there is much of medical and climatological interest, such as maps and diagrams, illustrative of the comparative mortality of the various infectious diseases in the twelve principal cities of the United States; diphtheria mortality of New York, Massachusetts, Philadelphia, England, London, Chicago, Berlin, Paris, etc., showing graphically the pre- and post-antitoxin death-rate; mortality from anesthetics; ratio of deaths to inhalations; maps showing variations of altitude, sunshine, rainfall, etc., of different sections of the United States; schematic design, showing comparative elevation above sea-level of the principal health resorts, with climatological and meteorological data relating to each. Other attractive charts represent the division of the population of each state and territory as regards city and country dwellers; color, race, etc.

The publishers intend to present this handsome, artistic, instructive and unusually expensive souvenir to their friends in the medical and dental professions, and will be pleased to receive and file requests for same, mentioning this journal.

ITEMS.

THE Maltine Company has distributed with its compliments a Physician's Visiting List, which is a pocket memorandum-book of great convenience. It is bound in black seal, flexible leather, is of convenient size, made of good paper, with gilt edges and rounded corners and is a ready reminder of the many excellent preparations made in the laboratories of this solid house.

THE Mellier Drug Company, 2112 Locust Street, St. Louis, Mo., on receipt of $1.00 will send, charges prepaid, a half-minute, self-registering clinical thermometer, with magnifying index and certificate of registration, in a handsome and durable aluminum case with chain and pin attachment. In addition it will send samples of tongaline liquid, tongaline and lithia tablets, tongaline tablets, tongaline and quinine tablets and ponca compound. Remit currency, money order, exchange on St. Louis, Chicago or New York—no personal check.

BUFFALO MEDICAL JOURNAL.

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Original Communications.

PARESIS AND CEREBRAL SYPHILIS.[1]

BY ARTHUR W. HURD, A. M., M. D., Buffalo, N. Y.,
Superintendent Buffalo State Hospital.

PARESIS, or as it is often called, general paralysis of the insane or paralytic dementia, in its ordinary manifestations is well known and needs no review. The classical type, beginning with the alteration in character and change in disposition, extravagant delusions, ataxia of speech and gait, with convulsive seizures, possibly periods of intermission, but through it all a progressive mental and physical degeneration, involving both the brain and spinal cord, is too familiar to need any rehearsing in a short paper; but I shall first speak of the resemblances and differences between cerebral syphilis and paresis, a distinction which is important from the points of diagnosis, prognosis and treatment, which everyone must admit who has much to do with such forms of disease, and especially those who through carelessness or unfamiliarity with the disease have passed well marked subjects of paresis for life insurance, as has often happened, only to be chagrined by their patients breaking down soon with most marked manifestations of a fatal disease. The differences in typical cases of each are many, but in atypical cases the manifestations are so nearly alike that differential diagnosis, no matter how important it may be, is often difficult and frequently impossible.

In passing, however, I wish to note one fact, as it raises a question which I hope will be settled sometime. That syphilis is often a cause of paresis no one will deny. That it may cause other symptoms which do not correspond to the usually accepted manifestations of paresis we shall see, and that a common cause should produce forms of disease which resemble each other is not surprising. We know that the virus or toxin of syphilis produces immediate lesions.

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[1] Read before the Section on Medicine, Buffalo Academy of Medicine, November 13, 1900.

When upon the skin or mucous membrane it usually acts quickly after infection, within a few weeks or months, but when it produces paresis or when it affects the nervous system generally, the duration is extremely long. Many cases of paresis come to us with histories of syphilitic infection of five, ten, fifteen and even twenty years standing; years and years after all of the manifestations have subsided and when the patient thought himself absolutely recovered.

Why syphilis is so long in attacking the nervous system and so quick to attack the cutaneous system, we do not know, but Alexander McLean Hamilton has raised the query which I simply wish to mention in passing, "whether there are any varying toxins in syphilis, some more active, which attack the skin and mucous membrane, and the like, and show immediate effects, and another toxin which has as yet eluded us, which lies dormant for many years until it finally shows itself, in either disease of the brain or spinal cord." This we hope will be elucidated, for the fact of paresis with a history of specific infection of from five to twenty years standing is too common to be dismissed; there must be some causal relation between the two. Is there not, therefore, some toxin as yet unknown to us which differs from the ordinary poison of syphilis, which is of this extremely slow but very forceful growth?

After considering the differential diagnosis between cases of ordinary paresis and cerebral syphilis, as it is ordinarily seen, I wish to note one form of cerebral syphilis, which I am inclined to believe is not common, but which from its course is likely to involve one in a mistaken prognosis, and also to discuss the influence of trauma in incipient paresis. This relation of syphilis to paresis has been very extensively discussed and studied and has even formed the subject of a symposium at an International Congress.

It is readily agreed that syphilis may be the cause (1) of any of the simple psychoses, aside from paresis; (2) that it may cause true general paralysis or give rise to certain similar symptoms, a clinical picture which has been denominated pseudo-paresis.

First.—Like any form of illness it may cause mania, melancholia or dementia.

Second.—It is generally acknowledged that syphilis may be the cause of true paresis and in a large proportion of cases apparently is. The third condition—namely, pseudo-paresis is what we wish to consider first. That the two diseases may approach each other and sometimes become confused is quite possible, especially in those cases in which the clinical picture in paresis is somewhat toned down, and in others in which the symptoms of cerebral syphilis are somewhat heightened. There are some which so closely approach each other as to lead some observers to deny practically any difference, but others vary so much as to be quite marked.

There is a difference in the mode of onset, and in specific diseases marked motor disorders usually precede the mental symptoms, while in paresis the reverse is usually the case. In specific disease also a temporary hypochondriacal or acute delirium may usher in the disease, while in paresis there is much more prolonged stage of onset, involving change in disposition, tastes, habits, and the like. Early paralyses of some of the ocular muscles, with difficulties of eyesight, optic neuritis, headache, nocturnal, deep, very persistent and urgent, local anesthesia, vaguely distributed, and neuralgia are much more common symptoms in specific cases. There are also differences in the general appearance and in the apparent condition of nutrition in the two cases. The paretic is usually of a comparatively good color, while the syphilitic cases show marked cachexia and anemia, even in the early stages. There is an irregularity in the appearance of the symptoms which is not found in paretic cases.

In paresis there is a fibrillary twitching of the tongue or facial muscles and hesitancy of speech quite characteristic, but if these are not fully developed we will derive but little help from them. In specific cases, however, the tremors and twitchings are more of a paralytic nature and have less of the ataxic in their character, and show less incoördination. The same is true of the existence of local muscular contractions and rigidities, and paralyses following convulsions are apt to be much more persistent in cases of specific disease; whereas, after convulsions the paralyses in paresis are frequently of a transient character.

The motor impairment in paresis is much more general and less localised and has an irregular course of progress, as distinguished from a more localised unilateral and constant paralysis in specific disease. Delusions of grandeur are much less pronounced, as a rule, in syphilis than in the paretic. One of the most diagnostic features, however, is, I think, the appearance and expression of well-being and of complacent groundless satisfaction with himself and his surroundings, which is at some time or other usually manifested in the paretic. It is something different from and more than the vacant expression which is often seen in specific dementia.

I cannot dwell on this phase of the subject at greater length, but will quote Mickle's table of points of differential diagnosis, acknowledging the great indebtedness of the profession to him for his work on this subject.

(*a*) The distinct history or symptoms of syphilis.

(*b*) The preceding cranial pains, nocturnal and intense.

(*c*) The exaltation, less marked, less persistent, and perhaps less associated with general maniacal restlessness and excitement than in most of the cases of general paralysis.

(*d*) Sometimes such complications as palsies of one or several cranial nerves, or hemiplegia, or paraplegia, having the character and course of syphilitic palsies.

(*e*) The greater frequency of optic neuritis, early amaurosis, deafness, local anesthesia, vertigo or local rigid contraction.

(*f*) The affection of articulation, paralytic rather than paretic, and usually the speech, which is not accompanied by any facial or labial tremors or twitchings.

(*g*) A frank cerebral or spinal meningitis or pachymeningitis.

(*h*) The variety of the motor and sensory symptoms.

(*i*) The effect of antisyphilitic treatment.

One of the strong points of differentiation remains to the last, and that is the variation in the course of syphilis, the prolongation of the disease beyond the average true paresis, the different results of specific treatment in cases with an avowed specific history and with lesions apart from the cerebral.

How syphilitic poison may be the cause of paresis years after infection and what the exact pathological progress has been in the brain, has been one of the most intricate and difficult of studies. While we know that the gross syphilitic lesions of the brain not paretic have a tendancy to affect the basal ganglia or cranial nerves, the bloodvessels and the meninges, both cortical and basal, yet in what way the changes in the brain in paresis of supposed syphilitic origin take place, has been a cloudy subject. One of the most important contributions to this question, however, has been given by Dr. Mott, pathologist of the London County Asylums, and has won attention from neurologists. I will endeavor to give a brief abstract of one of his discussions on the subject.

Mott's idea of the pathology of these parasyphilitic affections is that syphilis, whether acquired or inherited, may lower the specific vital energy of the nerve cells, so that the system of neurons may, under the influence of stress, in one form or another, die prematurely. He agrees with others that general paralysis is primarily a degeneration of the neuron with secondary changes in the membrane and vessels, in consequence of irritation from the products of degeneration. There are certain facts which support this view pathologically; certain regions of the brain are affected more than others; for instance take the central and frontal convolutions which generally show marked pia-arachnoid thickening, in comparison with the temporal and occipital lobes.

This has been associated by Flechsig with the distribution of the internal carotid artery. He considers that this pia-arachnoid thickening more closely corresponds with the distribution of veins which open into the longitudinal sinus, because in these veins the current is opposed to gravity, and on account of their oblique opening into the sinus and contrarily to the current in it, the area which is drained by them would be more likely to suffer from venous stasis, than the areas drained by the lateral sinuses and the torcula. Furthermore, he has found when nervous tissue breaks up, various products are formed which escape into the cerebro-spinal fluid, cholin, among others, and nucleo-proteid.

The existence, however, of various abnormal products in the cerebro-spinal fluid may explain the proliferation of the neuroglia elements; the nucleo-proteid constituent would suffice to explain venous stasis in areas undergoing degeneration, for it is known that this substance when injected into the circulation, even in small quantities, causes coagulation.

The dictum of Virchow "that a cell nourishes itself and is not nourished," is to Dr. Mott the fundamental principle of the pathology of general paraylsis. The complex nerve cell, termed the neuron, may undergo degeneration for two reasons: first, because the nutriment brought to it is inadequate, as, for example, in those forms of organic brain disease which arise from occlusion of arteries, there is obvious cause why the nervous units should cease to perform their functions; second, there is a reason why, when this cause is removed, the nerve cells will be restored in great measure to their original functions. But if the life of the nerve cell is coming to a close, it is of no use to bring fluid to nourish it, for it cannot assimilate it; therefore it dies prematurely. These degenerations are usually systemic; in the case of tabes the first afferent system of neurons is affected; in general paralysis it is usually the highest and latest developed association system of neurons which suffers first, but occasionally in the tabetic form it may begin in the first afferent system.

There is one striking feature in the pathology of general paralysis which is constant and that is that those delicate fibers which serve to coördinate afferent and efferent tracts, and association systems of the brain—that is the tangential system of fibers—are always wasted first. The syphilitic toxin is one of many factors in the production of the degenerative process, although not absolutely essential; at any rate, the statement "no syphilis no general paralysis" is not proved, but everything tends to prove that syphilis is the most important factor by reason of its prevalence, its persistence, and its potency in producing devitalising effects upon structures which are incapable of repair, and incapable of regeneration. The nerve-cells are perpetual elements; they exist when the body is developed at birth; there is no increase in number, there is merely an increase in complexity of structure. The neuron consists of a little mass of protoplasm which sends out one process, the neuraxon, and numbers of other processes, termed dendrons, until we have a structure very like a tree.

The syphilitic poison by its devitalising effects slowly produces a regressive metamorphosis, commencing at the terminal twigs and proceeding back to the trophic center, the cell body. If this be a slow process, involving only a small portion of the nervous system, as in tabes, autointoxication is less likely to occur from the breaking down of nervous matter. In rapid cases of general paralysis, where a large mass of nervous matter may be disintegrating, a vicious circle is liable to be established by the accumulation of products of degeneration in the perivascular lymphatics, causing vascular stasis and inflammation, which may be the exciting cause of fits and acute destruction of nervous matter. This seems highly probable, seeing that in cases where there have been prolonged epileptiform convulsions evidences of extensive degeneration in the crossed pyramidal fibers, upon examination of the spinal cord by the Marchi method, have been invariably found, proving therefore recent death of the psychomotor neurons of the Rolandic area. The fits were the evidence of the irritative discharge of the dying structures. This is the substance of Dr. Mott's discussion of the subject.

It will be noticed that Dr. Mott agrees with many other observers, that the specific poison is not the only factor, but to this must be added stress, and that is I think the common observation of all of us—that plus infection there usually is stress, worry, strain, etc., for in certain countries, for instance, in Mohammedan countries, where syphilis is quite prevalent, but where there is little push, anxiety or mental strain, paresis is extremely rare.

We know that syphilis of the brain manifests itself, generally speaking, in three different locations:

1. Along the basal ganglia, involving some of the nerves of special sense and some that preside over the motor apparatus of the eye.
2. Involving the bloodvessels.
3. The meninges.

There is a clinical manifestation of the disease which is quite rare, I am inclined to believe, and which may present itself in its fulminating character, de novo, or may arise in the course of one of these other syphilitic pathological situations; this is a condition in which the patient, after a more or less prolonged prodromal period, becomes suddenly and acutely worse with the symptoms of cerebral inflammation of a low grade. Without apparent pain or headache or photophobia, there are yet some of the symptoms of meningitis, but lacking some of the marked characteristics thereof. There may be extensive delusions, but they are fleeting and changeable and partake more of the nature of delirium. There is flushed face, great restlessness and excitement, and a temperature but moderately elevated, ranging in the neighborhood of 102°. This condition in its very active manifestations might be taken for a simple meningitis were it not for the known specific history of the patient. There are no paralyses of any muscles nor apparent disturbance of sensation.

With some of the symptoms of meningitis lacking the condition, is a puzzling one, but it seems possible and even probable that this is a true localised inflammation of the brain substance, or at least a meningo-encephalitis, distinct from the motor tracts and the basal ganglia. The condition is a rare one. It is mentioned by Dercum, who remarks its rarity, says that it may develop during the course of an infectious disease as well as during syphilis, and he emphasises the lack of pronounced symptoms. Of course I do not refer to such pronounced cases as those of traumatic origin, which eventuate in abscess of the brain.

The cases which I have had opportunity of seeing have been few, but have been characterised by quite a distinct clinical picture. In one an autopsy was not obtainable. The patient after a few months of irritability, excitement, nervousness, sleeplessness, emaciation and extravagance characteristic of paresis, suddenly developed a low febrile condition, a muttering incoherence and exhaustion, dry tongue, but no paraylses, ocular or otherwise, no apparent pain or photophobia. This condition continued with marked emaciation for a few weeks when death ensued. Prognosis in this case was an important one, both to the family and to business associates and had been guarded from the first.

Another case, in which cerebral syphilis had been diagnosticated for a year and the patient had been under treatment at his home, developed this same condition of low febrile delirium without paralyses, pain and the like, as noted before. With active specific medication, however, the patient recovered sufficiently to return to his home. He still has periods of epileptiform unconsciousness and will undoubtedly go on to a fatal termination, but the local condition seems to have been relieved for the time being.

There seems to be no reason, except for the tendency of a toxic substance to attack spaces directly communicating with the lymphatics and the arterial system, why this specific toxin should not attack the brain substance itself. That it does not do so more often is probably due to the anatomical arrangement of the vascular supply, but that it is possible to do this and to be very sudden and fulminating in its character is a contingency which may always be looked for. That this is a sudden termination of paresis of syphilitic origin is a constant possibility.

Another instance of sudden termination in paresis, in what seemed to be an ordinary case, has come to my notice recently and was of importance from the standpoint of an insurance company, as the duration for a case of paresis was unusually short. In this case the patient, who had the muscular and mental symptoms of paresis for a few months, showed great emaciation and finally died very suddenly. It is not known that the patient had a specific history, although it is quite possible. The shortness of the duration, naturally, called in question the diagnosis, but at an autopsy a thrombus of the basilar artery was found, which was undoubtedly the immediate determining cause of death. That thrombi occurring in smaller arteries should produce temporary paralysis is a common experience, but that in a case of paresis of specific origin the thrombus may fill so important an artery as the basilar and cause sudden death early in the history, is a point well worth remembering.

Another point in paresis which I spoke of first and which has been referred to in a recent article by Dr. Wm. C. Krauss, of this city,[1] and which has come to my observation quite forcibly, is the effect of an injury occurring to a person suffering from incipient or even unrecognised paresis or cerebral syphilis in developing the disease. A careful inquiry has developed the fact that some patients who had symptoms of paresis very slightly had, immediately after meeting with some accident, developed it; in fact, it seemed to cause the disease to blossom out.

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[1] BUFFALO MEDICAL JOURNAL, October, 1899.

In one case which came under my observation the patient was knocked down in the street and in a few days had every symptom of paresis, and this went on to a fully developed paresis, running the regular course, followed by death. Careful investigation led to the fact that he had shown some mental alteration before the accident. Further investigation led to the conclusion that he had been affected by syphilis years before and that the accident was simply the exciting cause of rapid development; a ripening influence which brought forward a result which would have been inevitable under any circumstances, but possibly postponed except for the trauma.

J. R., night watchman, in May, while in the pursuit of his duty was shot, being at the time in supposedly perfect health. Immediately after the shooting was confined to bed and during this confinement began to show mental disturbance, irritability, nervousness, sleeplessness, wandering, extravagant delusions, and the like. On being able to go about, he wandered about the streets looking for imaginary wealth, unable to concentrate his attention on anything for any length of time or to work. He was admitted to the hospital in September of the same year in an advanced stage of paresis and died in December of the same year, within eight months of the time when he was shot. This length of duration, of course, makes it improbable that his paresis started after the shot, but undoubtedly the accident simply served to bring it to the surface and to develop it.

Thus it is seen that without a careful study of the disease the accident or injury might be considered the cause of the paresis and damages sued for accordingly; whereas, in fact, the paresis was an underlying condition which the accident simply served to bring rapidly to the surface, and this is also true as a common experience in cases of syphilis.

Another interesting fact, and one which bears out the line of thought which I have endeavored to present here, is the influence which an attack of ordinary insanity may have in paving the way for a true paresis. Many patients after a typical attack of mania or melancholia, with a recovery or apparent recovery, come back after a few years of what is alleged by friends to be perfect health, with the symptoms of paresis well marked. It seems in perfect accord with the pathology of the subject which we have just studied, that the devitalising and depressing influence of the first attack on the brain has paved the way for a genuine paresis.

I might refer briefly to one test which has been suggested by Justus for the recognition of syphilis, in 1895. He asserted that a single inunction of mercury in all untreated cases of syphilis beyond the first stage, causes a reduction in the hemoglobin due to the sensitiveness of the red blood corpuscles to the drug, while in those not infected no reaction follows. Percentage of hemoglobin is determined first, then 40 to 60 grains of unguentum hydrargyri is used as inunction, and after an interval of some hours—24 to 72—the hemoglobin is then examined. There are some conditions which render the test not infallible.

It has been said that chlorosis may show some reaction, and it might be that other nonsyphilitic conditions may also. It is also said to fail in two classes—namely, in latent and early cases. The range of usefulness does not seem to be entirely worked out. In two of our cases I would say that the test was negative, but the course of the disease indicated that the patients did not have syphilis, and the negative, in so far as a negative test is of value, was in keeping with the subsequent clinical history. It is probable that this test, like many others, has fields of usefulness as an aid and assistance, but is not universally applicable or infallible.

With all our aids to diagnosis there still remains a certain number of cases in which the diagnosis must be in doubt and must be assisted by the effects of anti-specific treatment, and this has its limitations, for the test must be made before the brain syphilis, if it is brain syphilis, has produced marked pathological changes in the lumen of the vessels, deposits of inflammatory material and the like, which although the results of syphilitic virus, are not specific in themselves and are not affected by treatment.

SURGICAL COMPLICATIONS OF TYPHOID FEVER, AS OBSERVED AT U. S. GENERAL HOSPITAL, FORT MYER, VA.[1]

By VERTNER KENERSON, A. M., M. D., Buffalo, N. Y.,
Attending surgeon, Riverside Hospital; instructor in bacteriology and clinical surgery, University of Buffalo; captain and assistant surgeon, 74th Regiment, N. G., N. Y.; late acting assistant surgeon, U. S. Army.

IN THE spring of 1898, at the outbreak of hostilities between the United States and Spain, I obtained a place as contract surgeon in the army. The contract surgeons were being sent in large numbers south and directly to Cuba at the time I left Buffalo, but in the fortunes of war I received a general hospital assignment at Fort Myer, Va. This was a general hospital, situated near Washington, organised to receive typhoid fever patients from the volunteer camps of instruction, and specially from Camp Alger.

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[1] Read before the Section on Surgery, Buffalo Academy of Medicine, February 5, 1901.

At Fort Myer General Hospital, I experienced many interesting phases of typhoid, although not being able to assist in actual field service, and from my notes and charts prepared there, I now gather some points that may be interesting to you, or at least to some among the number here present.

It may be well to outline, in brief, the method of treatment followed with the cases where these complications were noted. Perhaps some of these complications arose on account of the treatment. The patients were taken sick while living in tents, and during their volunteer army service, at Camp Alger, Va. As soon as the true nature of the disease was ascertained, the patients were transferred to Fort Myer, and by as humane a method as possible. In some instances, they were transported in an army ambulance for sixteen miles, over a rough country road. Others were transferred by ambulance for about a mile and a half, and then by trolley car the remainder of the distance. Usually they were brought in such small numbers that they were kept in a recumbent position, but not always.

They were received at all stages of the disease, say from what would seem to be about the fifth day to the thirty-sixth. In no case, except those that were taken sick at the Post (five in number) did the cases come under observation until the fifth day. Some were received with transfer slips, stating they were in their thirty-fifth day of the disease, still in bed with low fever and delirium. The patients, for the most part, were men unacclimated and unused to the surroundings under which they were placed. The conditions were epidemic at Camp Alger.

Their surroundings at Fort Myer were of the best. They were in comparatively small wards, each containing from sixteen to twenty-four beds. One large ward, usually assigned to convalescent patients, contained upward of 300 beds in one room and under one roof. The conveniences were good, the appliances were ample, the nursing was good, and the medical officers were supplied in such numbers that usually one had to care for about sixty cases. Of this number, under ordinary circumstances, not more than one-third would be seriously ill at one time. This arrangement gave each man about twenty-five cases demanding his careful attention; the remainder were convalescents, or were suffering with a mild form of the disease. In general, it was arranged so that an increased force of trained nurses and hospital corps men would serve in the ward where the cases were most serious, and a smaller number in what was known as the convalescent wards. In case a patient had passed the acute stage and been transferred to a convalescent ward, then suffered relapse, he was at once re-transferred to the acute ward.

A majority of the surgeons arrived at Fort Myer prejudiced in favor of the Brand method of treating typhoid fever. They had, however, little or no practical experience in treating such patients as were received there—namely, those who had received no treatment for the first five days and had had a rough journey in arriving at the place of observation. In fact, I do not suppose men experienced in such conditions could have been found. Such conditions had not been present before in our generation. In private practice, with as good nursing and surroundings as were obtainable here, only 2 per cent. of the cases should die, provided the Brand method of treatment could be carried out. There, about 13 per cent. of the cases did die, and this notwithstanding the conditions were made very favorable to the carrying out of the Brand method.

A small minority of the surgeons carried out a purely expectant, symptomatic, course of treatment. Dr. Woodbridge was there, and carried out, in his cases, his own peculiar method of treatment. Under these favorable conditions, but with the class of cases treated, there were no comparisons to be drawn in favor of the Brand method, the expectant method, or the Woodbridge method of treatment. Complications arose among the patients under each method of treatment, and the percentage of deaths and sequelæ was about the same in each case.

It is not my intention in this paper to explain the methods of treatment in detail, to compare the same, or to take up and attempt to settle any disputed points. There will be included in this report, however, certain surgical cases which were operated upon, which were encountered in a group not proven to be typhoid fever, but which occurred with typhoid, or were mistaken for typhoid and sent in as such. There were about 2,300 cases treated. Of these, over 1,000 were typhoid, and about 700 malaria. Of the 1,000 cases, all especially interesting cases were seen by all members of the medical staff, as all met at headquarters every morning before nine o'clock, and all such cases were noted. Sometimes the commanding officer ordered and headed a board of consultation, and always the surgeon in charge of the particular interesting case was very glad to receive professional visits and suggestions, because in many cases under every surgeon's care he saw how hopeless were his own resources. Cases were assigned usually in rotation, except that officers sick with typhoid were sent to a separate ward, where special accommodations had been prepared for them. They, however, could not be given separate rooms, but were placed in small wards, each containing two or three beds.

As patients were discharged, new cases were assigned in rotation, and so each surgeon received approximately his quota of severe typhoid and mild cases, each, of course, with an occasional malarial case, an occasional rheumatic case, and others. Those cases that were evidently surgical were placed in my wards, or those that became surgical were so transferred. Besides these, I cared for and carefully studied sixty-four cases of typhoid. That study and those cases are the basis of the statements contained in this paper. I made personally and observed a positive Widal reaction in each case. This diagnosis was confirmed by an independent observer, Dr. J. J. Curry, of Boston. All cases that did not give the Widal reaction, although they resembled ever so strongly typhoid fever, have been omitted. We were ordered to report the cases where repeated trials failed to give a positive Widal reaction, as remittent malaria, and they are excluded here.

The cases came from regiments hailing from Massachusetts, Rhode Island, New York, New Jersey, Pennsylvania, Ohio, Illinois, Indiana, Missouri, Virginia and West Virginia. The patients were all white and were all volunteers. These 64 cases were under my care, varying from one day to 56 days, averaging 29½ days. Of these cases 8 died; 2 of perforation, 3 of hemorrhage, and 3 of the general severity of the disease, no hemorrhage or perforation being suspected. This is a percentage of 12½ per cent.

No disease is accompanied by so great a number and variety of complications as typhoid fever. Some of the complications named by Flint are: peritonitis, with and following, perforation of the bowel; pleuritis occurring in long and severe cases; pericarditis, endocarditis, meningitis, cerebral hemorrhage—which is very rare—otitis media or externa, cystitis, epididymitis, orchitis, embolism of the arteries of the lower extremities—with gangrene or without—embolism of the pulmonary artery, thrombosis of the femoral vein, with white swelling, thrombosis of other veins, thrombosis of the heart, arteritis, necrosis of bone, periostitis, bedsores, septicemia from bedsores, and other sources, pyemia, with abscess of the lungs, spleen and other parts, erysipelas, furuncles, retropharyngeal abscess, dysentery—chronic, following typhoid,—abscess of the liver, sometimes amebic, the typhoid fever being complicated with amebic dysentery, suppurative arthritis, pyemic or rheumatoid polyarthritis. Among my cases, I had good examples, and will give some details, of the cases having the following surgical complications of typhoid fever: localised and slowly extending general peritonitis, following perforation, in a convalescent patient; parotitis, liver abscess, following complication of amebic dysentery, otitis media, cystitis, orchitis, which went on to suppuration, necessitating unilateral castration, epididymitis; thrombosis of the femoral vein, with white swelling, thrombosis of other veins of lower extremities, bedsores—these were found only on those cases which had been treated for several weeks before being transferred to our care; no bedsores developed in my wards,—erysipelas, furuncles, idiopathic, and furuncles caused by the boring into the skin of a small parasite found on the ground in the Southern States, and known as a "jigger"; rheumatoid polyarthritis, suppurative arthritis.

Perforation of the intestine is liable to occur in one or more ulcers. Perforation occurs in about 1 per cent. of all typhoid cases, according to one authority, and in about 8 per cent. of the deaths from this disease. It is most frequent between the third and fifth weeks of the disease, is rarely caused by the primary sloughing, but is due to secondary ulceration after the separation of the slough. Perforation may be due to rupture of the thin floor of the wall by distension of the intestine with gas, by the impaction of feces, or according to Flint, from the presence of round worms. The opening in the peritoneal coat may be of considerable size, or may be no larger than a pin's point. With intestinal perforation are associated appearances denoting active or diffuse peritonitis.

Peritonitis is accompanied by escape of the gases and other contents of the intestine into the peritoneal sac. In rare instances, peritonitis is circumscribed around the seat of perforation by means of adhesions. Death may occur before sufficient time has elapsed for the appearance of inflammatory exudation. Perforation of the intestine is surgical because in a small percentage of cases of perforation the intestines are inactive and sluggish, and the peristalsis is limited. In these cases, there may be a strictly localised peritonitis, and, if the vitality of the patient is sufficient, operative interference may be advisable. Dr. Frank Hartley, in New York City, has operated upon several such cases—just how many I do not know, and with what percentage of recoveries I do not know. Among my own cases, I had two who had perforation, and both died. One case bid fair to remain localised sufficiently long to operate upon, and I personally believe if operation had been permissible, without moving him from his bed, it could have been done with a chance, small though it may have been, of success. The case was a convalescent, in good condition, recently transferred for purposes of furlough. He had been on full diet (solid food) for a week or ten days, was somewhat constipated, and appeared to be doing well. Suddenly, in the middle of the day, he was taken upon rising beside his chair, with a sharp pain in his left side, midway between the anterior superior spine and umbilicus. The pain was excruciating, he at once went to bed and, on being summoned, I found an acute localised sensitive distension, with rigidity. An hour's delay was necessitated and he was transferred to the operating room where were all appliances. Preparations were pushed, but, at the end of an hour, he was in poor condition; pulse was feeble, high, and breathing was distressed. The peritonitis was no longer localised, but had become general, hence he was returned to his cot, and died that night. An autopsy made by Dr. Zauner, of Philadelphia, showed a general peritonitis, with fecal material and gas, in considerable quantity in the peritoneal sac and a hole in the intestine about as large as the lead in an ordinary pencil.

The next complication I wish to note is that of parotitis, which is rare and involves one or both of the parotid glands. It leads to notable enlargement, and the appearance is like that of ordinary parotitis, or mumps; but, unlike the affection just named, in the great majority of cases suppuration takes place, and not infrequently there is more or less sloughing of the areolar tissue. This complication adds to the danger and retards convalescence, but is not to be regarded as a critical event, and may occur at any time of the febrile period, or during convalescence. Discharge of pus sometimes occurs into the meatus auditorius. This complication occurs in typhus, according to Flint, as well as typhoid. The cases of parotitis were interesting, and there were four in the list, only one double, the others involving the right side of the face.

The case of Private Denton, whose chart and outline of history is among those presented, was typical. He had been under my care for twelve days, with a temperature varying from 101° to 104°—with one drop to normal which led to a suspicion of hemorrhage, but none materialised—when on the 12th day, the right side of his face began to swell and became very tender. His father was present after the third day of his sickness and he said the boy had had mumps on both sides when a child. I simply state this fact as one of the surgeons present, Dr. Bradfield, a man of wide experience, and who had served in a surgeon's capacity in 1861-5, stated that the complication of parotitis did not occur in adults who had had mumps in infancy.

Denton's treatment, from time of admission to time of development of the parotitis, had been the Brand treatment unmodified. He had received from one to two plunge baths a day for any temperature of 103° or higher. After the development of parotitis, as above stated on the 12th day, his treatment was modified and he was sponged instead of being plunged. As soon as the parotitis developed, his face was poulticed with cloths wrung out of 1-80 carbolic solution, changed often enough to be kept warm. These were continued until fluctuation occurred, and then the gland was laid open freely under an anesthetic. As will be seen by looking at this chart, the complication raised his temperature for two or three days, until it was opened. On the fourth day of the progress of the parotitis, his temperature fell 6½°, and again the stools were watched carefully for hemorrhage, but none was found. The face, however, had become pretty well blanched by the application of the carbolic solution. Possibly the solution may have been used stronger than ordered. At any rate, I could not find any other good explanation for the sudden and great fall of temperature, unless it was from the coal tar poisoning from the long continued or too strong use of carbolic acid. The solution was changed, and his chart promptly resumed a low grade of fever, which continued for seven days more and then fell to normal. Parotitis is stated by Osler and Pepper to be a serious and dangerous complication and as occurring in only very sick cases. None of the cases observed by me died.

The occasional occurrence of thrombosis of the iliac or femoral vein on one or both sides is not rare, and is attended with swelling and pain of the corresponding limb. This complication rarely leads to evil consequence, but sudden death has been known to occur, caused by an embolus detached from the thrombus occluding the pulmonary artery.

In all cases, with such profound prostration as was present in most of these sixty-four cases, the patients remained so still in bed that they did not in many cases make any voluntary movement with the legs for some days or weeks. Following such inaction and low vitality, they, for the most part, had some difficulty when first allowed to swing their feet out of bed, with the lower extremities. Almost without exception, they complained during the first week of convalescence of pain, and swelling was frequently observed. This, however, was not due to thrombosis of the femoral, but to muscular inactivity and, if I may use the term, temporary atrophy. I saw, however, one case of apparently complete occlusion of the femoral vein, following a prolonged and severe case of typhoid fever. This patient, Chenoworth, a private of the 3d Missouri Regiment, had a typical occlusion of both femorals. The veins were discernible and easily palpable, whipcord like, and were so when he was discharged and sent home. The lymphatics were also evidently occluded, although no such demonstration was possible as in the case of the veins. So long as the patient remained in bed, his legs would be of proper size, but, when he was allowed to sit up, and latter when he was allowed to stand and walk, his legs promptly became swollen and at first very painful. Collateral circulation was very slowly established and complete recovery followed. The legs were bandaged, gentle massage was given below the knee, and no manipulation was allowed near the femoral opening for fear of dislodging the upper end of the clot and causing disastrous results. Chenoworth's case was the only one, in my series, where the veins occluded could be felt on both sides, and who completely recovered.

Private Connell, who when admitted was serving in the hospital corps, having been detailed to that duty from his regiment, which was originally the 5th Massachusetts, presented an interesting complication. The patient was past the average age of enlisted men, and was probably 38 or 40 years old. He was a native of Ireland, but had been a resident of Massachusetts for fifteen years. He was admitted to the wards of Dr. Pond with the transfer slip reading typhoid fever, and he gave the Widal reaction. He had been under treatment about seven days, his temperature running an irregular, but not septic chart, but as typical as most of our charts were of the text-book pictures of typhoid charts, when Dr. Pond discovered a fluctuating yet very resistant tumor below the ensiform cartilage. A consultation was held, and, without arriving at a diagnosis, the case was ordered transferred to my ward, and an exploratory diagnostic operation was determined upon. Ether was given, and I aspirated over the tumefaction and there obtained a quantity of pus. This, in one way, cleared the diagnosis, so I made a liberal incision into the most prominent part of the tumor and explored carefully with my finger. The abscess cavity was in the right lobe of the liver and practically involved the whole lobe. The adhesions bound the whole lobe of the liver very firmly to the body wall, hence I was careful not to break up the adhesions and enter the abdominal cavity. The abscess was filled with a soft, slimy, thick, viscid pus, not particularly foul smelling, but tenacious and not fully disintegrated. The abscess cavity was not walled, but uneven, and it would appear as if the liver had begun to decay in the center and had slowly eaten toward the capsule, decomposing faster in the liver tissue, and slower where there was a retaining fibrous tissue. It could be scooped out almost in cupfuls. The large extent of the abscess and the very poor condition of the patient forbade anything but necessary manipulation. The cavity was washed out with sterile salt solution and the wound and cavity packed with a Mikulicz bag of iodoform gauze filled, after placing, with crumpled sterile gauze; the patient was stimulated, and put to bed with plenty of heat.

Specimens of pus were examined by Dr. J. J. Curry, who found the material free from bacteria, but when examined on a warm stage, under light pressure and with a low power objective, the ameba of amebic dystentery were found in large numbers. These were kept alive for a day or two. Meanwhile, careful examinations of the stools were made and the ameba were found in plenty. The man's condition was precarious at the time of operation and he lived about forty-eight hours afterward. His case was the only one of amebic dystentery and complicating amebic abcesss of the liver reported. He had served with his regiment, with the same army corps, had had the same food, drank the same water, and had been taken sick while serving in the division hospital corps, and while caring for incipient typhoid cases, yet no other cases were reported.

The ameba coli was first accurately described by Losch in 1873. It was a round or irregularly shaped cell, about .02 or .04 mm. in diameter, consisting of a clear outer zone of protoplasm and of granular substance within. In the quiescent state, the ameba is round, but ordinarily it is in active movement, projecting pseudopods on every side, often several at a time, but usually only one or two. When surrounding conditions are not favorable to its life, the organism becomes encysted. In this condition, it is round or oval and quiescent, and is surrounded by a resistant outer covering.

The especially interesting thing about Connell's case was that his disease was tropical dysentery mistaken for complicating typhoid fever, occurring in a man from a northern state, then present in Virginia, having been there less than a month, aad where the temperature was 80-90°, with the nights cool. He was taken sick in July,

1898. We examined many other cases when the dysentery was a marked symptom, but did not find the ameba coli again. An ameba, which at any rate is similar to this one, is found occasionally in the swampy land water in this vicinity. In October of 1900, I saw some specimens in the hands of Dr. Williams and Dr. Barrows at the pathological laboratory of the University of Buffalo. I suppose this needs simply a proper climate, a weakened constitution and an entrance into the system to bring about a dysentery, which was for many years a mysterious uncontrollable and usually fatal disease and was known as tropical dysentery.

In referring to intestinal hemorrhage as a surgical complication of typhoid, I must needs explain that these were surgical cases simply because we treated them surgically—namely, with intravenous injection of sterile normal salt solution. When any sudden fall in temperature indicated a possible hemorrhage, all plunge bathing was at once discontinued, sponge baths were substituted and were given for any temperature of 103° or worse, opium was given, and, if no vomiting or undigested curds had been observed in the stools, the milk was scalded and served cold, as before, the frequency of feeding being made three instead of two hours. If the stools following the drop in temperature showed the characteristic tarry mass or blood, pure and simple, or if the unmistakable collapse followed and the pulse became weak, thready and high, the diagnosis of hemorrhage was confirmed.

Some of these cases of hemorrhage showed very few untoward symptoms. They were simply given one-third of a grain of opium, the diet modified for a day or two, sponge baths in place of plunge baths were continued, and they went forward to convalescence. Some other cases, severe in character, discouraging to the general look, were treated with intravenous injections of salt solution. The median basilic vein was opened, a canula was inserted, and sufficient salt solution was injected to bring the pulse up, so that it was a palpable quantity. This required, in every case, one pint, and in two cases, three pints. The veins were not any harder to find, secure and open, than they would be in any exsanguinated person. Of these seven cases, all severe, two lived and five died. Of the five who died, two were members of the Niagara Falls Company, and were desperately sick when admitted to my wards. They were the famous cases of Stahl and Stricker, who died a few hours after admission and were sent home after death. The government does not furnish a new uniform for deceased soldiers who have not had forethought enough to draw one, and these two men came to the general hospital in suits in which they had been digging trenches when they were taken sick, they having drawn only one suit. While they were at Fort Myer, they had been bathed every four hours, put into clean sheets a dozen times, but when they died and we were ordered to send them home, they were dressed in their own suits, which were not clean. When they were received in this condition at Niagara Falls, a great howl was raised, a public indignation meeting was held, inflammatory speeches were made, money was raised, and a committee of public safety was ordered to come and investigate us. I met the committee, which was an extremely sensible one, composed of Major Butler (now mayor of Niagara Falls), and one of the ministers there, who was sensible, and yet who wanted to know why those things were necessary. The cases were both desperate cases and should not be counted in this consideration. The percentage there is improved, counting the five cases—two recovered and three died—and these were when repeated hemorrhages had occurred, when the general condition was poor, pulse weak, and nothing in their favor.

Dr. Woodbridge treated one case, which was not transferred to me, by subcutaneous injections of salt solution, but the case had to be counted in his mortality list, which I think was the same as my own, 12½ per cent. It was thought that the normal salt solution, instilled as I have suggested, abated the intensity of the disease in the two cases mentioned which recovered, and I used it after consultation with other members of the staff and Major Davis in two cases that were desperately ill, with marked nervous symptoms, and yet with weak pulse. I instilled in each case a pint and a half, with the result that the character of the pulse was improved, the nervous symptoms were improved, and a temporary improvement was noted in the charts, but both cases died.

I wish to digress here to head off a repetition of some criticism which I gladly received from Drs. Eugene and Chauncey P. Smith when I read my last paper before this body—namely, that salt solution properly introduced at a right temperature (110° to 120°) in proper cases never kills *per se*. I have made a careful search of the literature by means of the indices and periodicals, and can find no mention made of the matter, and must decline to believe that in cases of collapse from loss of blood, sudden serious impoverishment of the blood as from some loss—probably small—and a high grade of fever that the intravenous injection of salt solution can be of any injury, but will be of direct advantage. The case in which this criticism was evoked was one in which serious loss of blood and lymph was encountered, and was expected, and preparation made accordingly, and when collapse came prompt instillation was made, and the criticism was that the salt solution killed the child, hence should not have been used.

There were several other cases where, for hemorrhage, intravenous instillation of salt solution was practised, but they did not come under my personal care except for the operative procedure, which are not included in this paper. Dr. Baker, of Washington, D. C., was in charge of several of these cases, which all did well immediately, but whether they went on serenely to convalescence or not I do not know. I saw in consultation two cases of otitis media, complicating typhoid. They were both in men who were uncleanly in their habits, and both appeared during the severity of the disease. Both cases had far advanced, and were only detected when rupture of the drum and exudate of pus announced the condition. Both cases showed a staphylococcus pus and no typhoid bacillus. I think these cases were coincident, caused by weakened condition and uncleanly habits.

Cystitis after prolonged confinement in bed with great prostration and more atonic than septic, was seen in three cases. There was no treatment adopted except to hurry the convalescence, push the food and stimulation, and give benzoate of sodium in sufficient doses to get and keep the urine acid, or nearly so. The patients suffering from cystitis were given massage, urged to get up and out into the sun. Bladder washing was not found necessary in any case. Several cases of orchitis were developed in patients where no history of gonorrhea could be obtained, and the history in each case was considered reliable. In one case the condition continued for two weeks and, a small fluctuating spot appearing near the skin of the scrotum, it was opened, considerable pus discharged and continued to discharge. The sinus opened led to many others. Sensations on pressure were no longer referred to the cord, but simple tenderness as over any abscess supervened. It was concluded the entire testicle had become disintegrated, and I accordingly removed the organ by the usual procedure. The spermatic cord was not found involved. The patient made an uneventful recovery, was up and out in a few days, and shortly after discharge from hospital was arrested for rape.

Cases of erysipelas developed, and were isolated, but were not transferred to my wards, and none of them were complicated by pus formations. Numerous cases of extensive involvement of the skin by furuncle were noted, and were due, I suppose, to the general atony following the disease. They appeared on all parts of the body, but were not partial to the hands and face, preferring the limbs and body. Among these cases were two of especial interest, as their etiology involved what was to me a new process. These patients were received in a convalescent stage from one of the Southern camps. They had been quartered in camps for some time and had slept on the ground or upon their blankets when not displaced. They had then been taken sick, their disease had taken its course, and while sick in hospitals had, I believe, been sleeping on hospital cots. When received at Fort Myer they were covered with little boils apparently all over their backs. No space as large as a silver dollar but that had a small or large a-coming or a-gone furuncle. One of our surgeons from Cincinnati, who served as hospital steward in the army in 1864-5, and who was still active, recognised the condition at once, and, squeezing out one of the festers, showed that it was the larvæ of a "jigger," a small round insect that delights to bore into the skin of men sleeping on the ground in the Southern States and deposit its eggs. These in due time become hatched and a foreign body, and in the run-down condition in which a convalescent typhoid found himself easily infected. The treatment was the popping out of these little grub-like animals and syringing out each little cavity with peroxide of hydrogen. The cavities usually healed kindly. When I saw those men's backs, I for the first time appreciated the exclamation I had heard many times before but never knew the meaning of. The exclamation was, "Well, I'll be jiggered." Judging from his suffering and appearance, no one would ever be "jiggered" if he could help himself.

Finally, I cannot close the paper without a word for my associates and superior. They were all gentlemen, men of wide personal experience, both in the general experience and professional attainment. Dr. Baker, of Washington, was a keen observer, careful and painstaking. He was scientific, and had had a considerable acquaintance with the flats around Washington and their malarial tendencies, and was of great assistance in blood examinations.

Dr. Zauner, of Philadelphia, was for many years connected with the board of health in New York City, and was of great assistance, and by his keen observation kept us from epidemics of measles, erysipelas and smallpox.

Dr. J. J. Curry, of Boston, was one of Dr. Councilman's and Dr. Mallory's proteges, and although argumentative, was of inestimable value.

Finally, Major Davis, who is known to many of you here, was the commanding officer. He will be remembered by the University of Buffalo men as a student in '55. While here he was, I think, as he was when I knew him in New York, an unobtrusive keen observer and accurate analysist of new methods and always a hard worker and full of resource. He passed almost thirty years of his life in the service of the United States army. He knew intimately all the requirements of the service, and red tape to him was just simply a measuring rod to lay off how much and when needed, and cut it off. He was a loyal and generous commanding officer, and we all reverenced him, respected him and obeyed him willingly, and always with pleasure and advantage to ourselves.

186 Allen Street.

EXCISION OF HEMORRHOIDS.

By WILLIAM L. DICKINSON, M. D., Saginaw, Mich.,
Professor of rectal diseases, Saginaw Valley Medical College.

HEMORRHOIDS, either internal or external, can be successfully removed by excision, and in most cases with but little pain following their removal. In this brief paper I will endeavor to give my method of operating and also the after-treatment required.

External hemorrhoids should be made as nearly aseptic as possible by the usual means, and then injected with a 5 per cent. solution of nirvanine. Now grasping with forceps, we lift the hemorrhoid well up, and with scissors curved on the flat, and cut the tumor off close to its base. Curette the base, using a sharp instrument, in order to remove every vestige of the hemorrhoid. The hemorrhage is usually slight and easily controlled by pressure with a gauze compress wrung out of hot water and applied for two or three minutes. If the compress does not control the hemorrhage, we put on a hemostatic forceps for a few minutes. When the hemorrhage has stopped, we unite the two sides of the incision with fine catgut, and apply a sterilised gauze pad held in place by a T bandage. It is well to keep the patient in the house and in a recumbent position for four to six days, when the parts will be healed.

In the treatment of internal hemorrhoids by excision, we must prepare our patient for the operation by giving three improved compound cathartic pills two nights before the day of the operation; the next day give half an ounce of sulphate of magnesia in six ounces of hot water every four hours until four doses are given.

The morning of the operation an enema of plain sterilised hot water is to be given, and now we have the bowels so free of fecal matter that it will not be necessary to have them moved for five or six days following the operation. We are now ready for the operation. The patient is placed on the operating table and the anesthetic given. The anal region is scrubbed with green soap, and washed with corrosive sublimate solution, and then with alcohol.

The sphincters are now dilated until all resistance is overcome; then we apply five or six of Pratt's T forceps, handing them to our two assistants, who now pull down and outward upon them, thus exposing to view the mucous membrane of the bowel for a distance of an inch or an inch and a half. Each internal hemorrhoid in turn is grasped with a forceps, elevated as much as possible, and cut off with the scissors. Curette the base of each hemorrhoid and stop the hemorrhage with a compress wrung out of hot water. We now dust the parts with orthoform, remove the T forceps and pack the lower end of the rectum with a strip of iodoform gauze one inch wide, that has been lubricated with sterilised vaseline. It is better to use the vaseline on the gauze, as it makes it easier to remove it when necessary.

Hemorrhoids treated in this way are not very painful and it only confines the patient to the bed about one week. We use the pad and T bandage after operation upon internal hemorrhoids, as it makes it much more comfortable for the patient.

The advantages of this operation are less pain and shorter time confined to the bed and house. I have frequently been asked the question as to the danger of secondary hemorrhage, and will say that I have not had a case of secondary hemorrhage and have operated on a number of patients by this method. If we are careful to pack the lower end of the rectum tightly with iodoform gauze, there cannot be any hemorrhage immediately following the operation, and after twenty-four or forty-eight hours, when the gauze is removed, in my judgment there is no longer any danger of it.

917 GENESEE AVENUE.

ALABAMA has declared wisely through a recent statute enacted by her legislature, that christian scientists and faith-curists cannot longer practise their medical legerdemain in that state.

FUNCTIONAL DISORDERS OF DIGESTION.[1]

By CLARENCE KING, M. D., Machias, N. Y.,
Physician to the Cattaraugus County Hospital.

THE three great organs of digestion are the small intestines, the liver and the pancreas; deprived of either one of these, or with the function of either seriously and continuously interfered with, the person soon dies. The auxillary organs of digestion are the stomach and the salivary glands of the mouth. This statement is greatly at variance with our former ideas of digestion, for it has been thought until recently that the stomach was the organ principally concerned. But that such is not the case recent observations amply demonstrate. It is now generally acknowledged that by far the greater part of digestion takes place in the intestines, some authorities placing it as high as 90 per cent. No class of food stuff depends entirely upon the stomach for its digestion, but all may be acted upon further along in the alimentary passage. For this reason, we must admit, the stomach resembles the mouth with its unimportant glandular appendages, more than it does the great intestinal laboratory or factory with its very essential secretions, and great digestive activity. But it differs from both in being the storehouse which receives the food and slowly filters it into the intestines in such quantities as to meet the possibilities of the intestinal fluids for digestion. The pylorus guards the entrance to the intestine and regulates the supply of raw material to this digestive workshop. Without this safeguard the intestine would be flushed with fluid or its upper part at least overloaded with semi-solid material after each meal, before the necessary digestive fluids could be secreted in sufficient quantity to effect digestion.

The function of the stomach aside from that mentioned, is mainly to supplement the teeth in finely dividing and macerating the food so it can be brought more intimately in contact with the digestive fluids. In this respect it resembles somewhat the gizzard of the fowl. But it has a digestive function as well, the same as the bucal cavity, although as stated, this is not necessary to life. That the stomach is not essential to digestion is proven by Schlatter's patient who suffered complete excision of the stomach with little ill effect. Its digestive ability is therefore limited, perhaps its most important function being to dissolve the fibrous connective tissue of meats, thus freeing the muscular fibers and fats for intestinal digestion. It also coagulates casein and dissolves albumin, but upon starch, sugar and fats, it has no influence.

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[1] Read before the Medical Society of the County of Cattaraugus, at Olean, N. Y., February 5, 1901.

The saliva of the mouth converts starch into glucose and this function of saliva remains active for a time in the stomach, although acids soon stop it. In the same way the acid and ferments of the stomach continue their activity in the upper intestine, until they are finally neutralised and rendered inert by the alkaline intestinal and pancreatic juices. The secretion of the intestinal glands converts starch into sugar, as also does the pancreatic secretion; and it is probably the agent principally concerned in the digestion of meats and albumin. The best known function of the pancreatic juice is its action in emulsifying fats; but this is by no means its only function in digestion. It is now positively known that it has an important action upon the digestion of the nitrogenous principles and that the albuminoids, casein, gluten and muscular fibers are all digested by it. The action of the bile in digestion is not as well known as the other fluids, but that it has an important function there can be no doubt. It probably assists in the digestion of all the various articles of food or is essential to their absorption and assimilation. Intestinal putrefaction is prevented by it and peristalsis regulated. But aside from these facts there is little positively known about the influence of either the bile or pancreatic fluid.

The symptoms which usually accompany disturbances of digestion and to which the term dyspepsia is generally applied are: pain or distress at the epigastrium, a sensation of weight or fulness in the stomach after eating, impaired appetite, belching of gas, a furred tongue and constipation. With these there may be vomiting, pyrosis, abdominal tympanites, vertigo and other abnormal sensations. These symptoms may be present in certain organic diseases of the stomach or intestines and may for a time be the only evidence of disease; they are also common to several dissimilar functional disorders. If due to organic disease, there will generally be found some other distinctive symptom by which the true nature of the complaint can be recognised; but when functional, they often form our only guide to diagnosis. And too often even at the present time an attempt at an exact diagnosis is not made, but the symptoms are accounted for by the generic term "dyspepsia," or a "little stomach trouble." These are the cases which were formally treated in a routine manner with hydrochloric acid, pepsin, nux vomica, gentian and alkalies, sometimes with and sometimes without benefit.

Recent investigation has succeeded in clearing up much of the uncertainty which surrounded the diseases of the stomach. But while the diseases of the stomach and stomach digestion are comparatively well known, the diseases or disturbances of digestion below the pylorus are very poorly understood. This is no doubt due to the fact that no way has been devised by which we can obtain for examination the contents of the bowel at different parts and during different stages of the digestive process. Our knowledge of intestinal digestion is mostly derived from observations upon the lower animals and our ignorance concerning it, as it occurs in the human being or its condition in any individual patient, whether normal or disturbed, is too apparent for any one to question. Doubtless the derangements of intestinal digestion, pure and simple, are not as frequent as those of the stomach, for the reason that the intestine is better protected from severe and improper usage than the stomach. All food which enters the intestine has first to pass through the stomach and its physical and chemical characters are there somewhat changed and corrected, to make it suitable for the intestine. Thus the extremes of temperature are corrected, and hot or cold fluids or foods are brought to the happy medium of blood heat by the stomach, and are passed to the intestine at the temperature most favorable for digestion and least likely to cause harm. Strong irritants are retained in the stomach until they are largely diluted and rendered harmless; and indigestible substances are made less dangerous by having their rough edges wore off and their surfaces coated with mucus before they enter the intestine. This careful protection of the really important part of the digestive tract is in accordance with the wise provision of nature, which throws extra safeguards around the vital processes of our being in order to protect them from serious injury.

Stomach digestion begins immediately after the ingestion of food and is completed normally in from two to three hours, according to the character of the food. It is an intermittent function and regulated by the frequency of the meals. But intestinal digestion is practically a continuous process for it is both slower and much more perfectly performed. The secretions may be thrown out at intervals, but the solvent or digestive action continues so long as there is anything within the digestive area, and this is continued during sleep the same as during the wakeful hours. Advantage may be taken of this fact in treating certain cases of insomnia, since a full meal at bedtime of some bland and unirritating articles of diet will often produce sleep much better than opiates; while indigestible food will have the opposite effect.

The majority of cases of gastric indigestion are those of overstimulation; hence stimulants like nux vomica and ginger can do no good. For these sedatives are required, of which bismuth is the type, and, as over-stimulation produces an excess of acid, it is necessary to combine an alkali, as magnesia, with the sedative. But on the other hand, if the urine contains indican without obvious extra-intestinal cause, as will be explained later, we should institute treatment by measures intended to stimulate the gastric and biliary secretions. For this purpose the bitter tonics and chologogues may be tried, or the mineral acids, or Prof. Porter's favorite prescription, which contains ox-gall, pancreatin, caffeine, compound extract colocynth and strychnia. If improvement does not occur from these measures a more thorough examination should be made by the passage of the stomach tube and an analysis of the stomach contents.

The anatomical diseases of the stomach are five in number, and it will be necessary to consider and exclude them in order to reach a diagnosis of a purely functional disorder, for they give rise to digestive disturbances the same as the functional diseases. They can generally be diagnosticated by their physical signs without resource to the stomach tube. Ulcer and cancer we will dismiss without further notice, although chemical analysis is an aid to diagnosis in the early stages. Displacements and enlargements of the stomach must be made out by palpation and percussion, either with or without inflation of the stomach with gas. Obstruction at the orifices is diagnosticated by palpation in conjunction with the subjective symptoms, and the use of the esophageal sound when it is the cardiac orifice which is obstructed. Of gastritis, I will speak presently.

The motor function of the stomach is frequently disturbed, especially as a complication of other diseases. Atony may be detected by the splashing sound produced by short, quick blows with the finger over the stomach at a time when the organ normally is empty. Of course, it indicates fluid in the stomach and generally dilatation also. It gives rise to dyspeptic symptoms, minus the pain, and obviously is not benefited by pepsin, acid or alkalies, but by general tonics, lavage, electricity and massage. Eructation, pyrosis, regurgitation and rumination are perversions of the motor function, the first two of which are common symptoms of other diseases and are generally helped by treatment of the primary disease; the others are rare. Spasms of the orifices are also rare and can scarcely be distinguished from organic strictures; their treatment is mostly surgical, although bromides and opiates have been thought to have some beneficial effect.

To further investigate the diseases of the stomach, we need the stomach contents taken at a certain time after a specified meal, at which time we know the normal condition of digestion. The stomach contents are obtained for examination by passing the tube one hour after the Boas-Ewald test breakfast, which consists of one or two rolls, or a slice of bread and a cup of tea or a glass of water. After the tube is introduced the patient should make compression of the abdomen and express as much of the stomach contents as possible. If difficulty is experienced in getting the contents, the tube may be shaken violently or a suction effect employed by means of a rubber bulb. Care should be taken to have the head well thrown back to avoid a sharp bend in the tube in the pharynx.

The stomach contents thus obtained should be measured, but as it is impossible to be sure that all of the contents have been obtained, the following method has been devised to estimate the amount remaining. After obtaining all that is possible with the tube two hundred cubic centimeters of clear water is poured into the stomach and after a few minutes withdrawn. The acidity of the contents expressed and of this stomach, washing is determined separately by the method I will soon describe and the amount of contents remaining after expression is figured from these results, which added to the measured amount of contents expressed gives the total contents. Normally, this should be about 125 to 150 cubic centimeters.

To obtain the amount of the contents remaining after expression, we should multiply the acidity of the diluted contents by 200, (the amount of water introduced,) and divide the product by the difference between the total acidity and the acidity of the diluted contents. If the total contents is too high, it shows the motor function is at fault and that some degree of atony is present, but if it is too low there will generally be found hyperchlohydria and increased peristaltic activity. The motor function can also be tested without the use of the tube in the following manner: 15 grains of salol in capsules are given soon after eating and the urine examined at intervals for salicyluric acid. This is easily detected by moistening filter or blotting paper with the urine and treating with a drop of a 10 per cent. ferric chloride solution. If salicyluric acid is present there will be formed a violet color around the drop of iron solution.

The stomach contents obtained by expression should first be examined for mucus. That which floats on top should be removed, for that is from the throat or esophagus and has nothing to do with the stomach. Then with a fine wire or a splinter of wood, the expressed material should be searched for shreads of mucus, which may be intimately mixed with it. If any mucus is found it shows inflammation of the gastric mucosa or gastritis in some form and the case is therefore out of our present consideration.

The expressed contents we have obtained should then be filtered and the filtrate examined for acids. Congo red test paper is changed to dark blue if free acid is present and dimethyl-amido-azo-benzol paper is turned red if that free acid is hydrochloric. If hydrochloric acid is present the amount should be estimated, which is done by adding a few drops of a 1 per cent. solution of dimethyl-amido-azo-benzol to five cubic centimeters of the filtrate, and titrating with enough decinormal solution of sodium hydrate to effect discolorisation. The amount in cubic centimeters of sodium hydrate solution used multiplied by 20, will represent the amount of free hydrochloric acid to 100 cubic centimeters of filtrate. Normally this should be between 10 and 20. To obtain the total acidity a few drops of a 1 per cent. solution of phenol-phthalein should be added and the titration with sodium hydrate continued until a slightly red color appears. The total amount of the sodium hydrate solution used multiplied by 20, gives the total acidity; in health this is between 50 and 60. If these figures are increased hyperchlorhydria is present. This is generally due to simple nervous or mental causes or to errors in diet, but may be caused by ulcer. It is therefore of value in the differential diagnosis of ulcer from cancer, for with cancer hydrochloric acid is diminished or absent. When hyperchlorhydria is functional its treatment consists in the administration of nerve sedatives, regulation of the diet, lavage and the use of alkalies at the end of stomach digestion, to neutralise the excess of acid. If mental overwork, grief or worry is a factor in the case, it should be removed if possible and a month's vacation under change of conditions taken.

Deficient secretion of hydrochloric acid and lessened acidity may be due to cancer, acute or chronic gastritis, dilatation, atony or atrophy of the stomach, neurasthenia and hysterical or atonic dyspepsia, so-called. If the test papers show a free acid present, but no hydrochloric acid, then the acid is organic and may be butyric, acetic or lactic. Butyric acid is recognised by its strong odor of rancid butter, acetic acid also by its odor, and lactic acid by the following method: 5 cubic centimeters of the filtrate are diluted with 50 cubic centimeters of water, and one or two drops of a 5 per cent. solution of sesquichloride of iron added. If lactic acid is present there will be a distinct greenish-yellow color obtained. The significance of these acids is that they point to the probable presence of carcinoma, but certain precautions must be taken. Thus, as regards acetic acid, we must exclude the previous ingestion of alcoholic drinks; and as regards the other two must have washed the stomach thoroughly and given a test meal, preferably of soup, before passing the tube.

The normal acidity of the gastric juice is due to three factors—namely, free hydrochloric acid, loosely combined hydrochloric acid and certain acid salts; in diseased conditions there may be organic acids present also. The ferments require for their activity hydrochloric acid, either free or combined. Free acid does not appear until after a certain amount has combined with the albuminous food; and, hence, if free acid is absent, it is necessary to determine if there is any combined acid in order to know if peptic activity is possible. If there is any hydrochloric acid at all secreted pepsin, is secreted also and is active to the extent of the acid. This rule is almost absolute. Consequently, we need not concern ourselves much with the pepsin. But the combined acid may be determined by finding the amount of free acid and acid salts and subtracting from the total acidity. The free acids and acid salts together, are found by adding two or three drops of a one-half per cent. solution of alizarin to 5 cubic centimeters of stomach filtrate, and enough of the decinormal sodium hydrate solution to obtain a clear violet color. The amount of sodium hydrate solution used, multiplied by 20 gives the acidity of the free acids and acid salts together. Obviously, the absence of combined hydrochloric acid has no great diagnostic value, for it can be absent only in those diseases where there is no free hydrochloric acid and only occasionally is wanting in them. But it has an important bearing on prognosis and on the dietetic indications, for if all hydrochloric acid and consequently pepsin and its zymogen is absent or inactive it shows that glandular activity is totally and permanently destroyed, and that such food must only be ingested as will quickly come to pancreatic digestion and require no preliminary preparation in the stomach. The examination for pepsin, starch, sugar, bile and blood is seldom required, and will not be here described.

Intestinal indigestion, as a functional disorder, is perhaps most frequent in persons past middle age and in those persons whose general health is below the normal standard, as the result of previous sickness, anemia, neurasthenia, syphilis or tuberculosis. But it is also frequent in infants and children when it is often overlooked and the symptoms attributed to other causes. In infants the shape and relative position of the stomach are such as to favor the early discharge of its contents into the intestine; and, as it is deficient in acid and ferments, it is unable to properly prepare solid food for intestinal digestion, and putrefaction and indigestion results. In men the influence of alcohol and tobacco in causing indigestion, both gastric and intestinal, can not be doubted; while in women constipation is perhaps its most potent cause. Of course, any disease which interferes with the proper secretion of the intestinal fluids which are concerned in digestion will give rise to indigestion. Errors of the portal circulation caused by cancer or cirrhosis, chronic hepatitis or catarrh of the biliary ducts may also produce it. Diseases of the pancreas of whatever nature are attended by intestinal indigestion, and chronic catarrh of the small intestines, by interfering with the secretion of the intestinal glands, may give rise to it. Many other causes have been assigned, but they are far-fetched and rather indefinite.

The subjective symptoms of intestinal indigestion are similar to those produced by disturbances of the gastric function and, indeed, the two are often, if not generally, associated. Either may be acute or chronic. When acute, there is generally pain, vomiting, diarrhea and fever, and in infants these symptoms are sometimes quite severe. Convulsions may be initial symptoms, or they may occur after a few hours and be repeated several times. In older children and adults, in addition to the pain and vomiting, there may be tympanites, a furred tongue and a history of the ingestion of some food or substance difficult of digestion. The hot weather of summer is an important factor in producing gastro-intestinal indigestion, especially in infants who are bottle fed, due in part to some fermentation change in the milk, and in part to the effect of the heat itself in destroying or enfeebling the equilibrium of the nervous centers.

Chronic indigestion is much more frequent in adults than the acute form, although in infants and children the reverse is undoubtedly true. At first there is a feeling of weight or distress in the stomach after dinner or after eating certain articles of food, and an uncomfortable fulness in the abdomen is complained of. There is frequently a coated tongue and belching of gas, and constipation is a very common feature. So insidiously do the symptoms develop, it is impossible to assign a time as the beginning of the trouble, but they increase in severity and may last indefinitely. When the patient finally presents himself for treatment, there is generally a poor appetite, with more or less pain after eating, and, perhaps, headache, vertigo, palpation of the heart, disturbed sleep and pyrosis. But sour eructations or the raising of sour fluid from the stomach has only a general symptomatic value and does not necessarily mean an excess of acid. There is seldom any great loss of flesh in these diseases unless there is some other serious disease to which indigestion is secondary, or the disease has lasted a long time and been unusually severe.

We have already intimated that gastric and intestinal indigestion are frequently, if not usually, associated, but it is often possible to determine which predominates. With gastric indigestion the pain and tenderness is referred to the epigastrium or the region of the stomach, while with intestinal indigestion it is about the umbilicus. With the former there is either diarrhea or constipation, or the two alternate; but with the latter constipation is nearly always present, and often the feces are passed as hard balls, due to an associated colitis. Headache, vertigo and palpitation are, perhaps, more common with intestinal disorder, and represent a toxemia from absorption of gases of putrefaction in the intestine. Other disturbances of the cerebrum, as insomnia, mental inertia, hypochrondia, perversions of the special senses and epileptiform convulsions, all point to intestinal indigestion as their origin; while sour eructations, pyrosis and frequent vomiting, are symptoms of gastric origin. Slight icterus, or the presence of bile or its coloring matter in the urine, shows that the function of the liver is interfered with, and the bile does not reach the intestine to aid in digestion. In like manner fat in the stools indicates disease of the pancreas, probably organic, but it may be possible there are functional disorders of this organ as well with which we are not acquainted. And finally, if the urine deposits a large amount of urates upon cooling, or if the extremities or body has the sensation of being swelled or bloated from capillary engorgement when no dropsy is present, then we may know the disease is intestinal rather than gastric.

I have said that we are unable to analyse the intestinal contents for defects in intestinal digestion, but we, nevertheless, have a test which gives us positive information in regard to this part of the intestinal tract. If putrefaction, and consequently indigestion, is present in the intestinal canal, indican appears in the urine in abnormal quantity and can readily be detected by analysis. The hydrochloric acid of the gastric juice is the normal intestinal antiseptic, and it is in those cases where this acid is deficient that putrefaction is most certain to occur and indican be present in the urine. But it most frequently occurs in those diseases of the small intestine, which are attended by diminished peristalsis from a lessened amount of bile, but is never found in disease of the large intestine alone. And, lastly, indican may attend albuminous putrefaction in other places than the intestine, as in empyema, putrid bronchitis, gangrene, and occasionally in abscess. Hence, it will be seen that the examination of the urine for indican is very important, and that it has a clinical significance barely second to albumin or sugar. If we are able to exclude this last source in any individual case, its value as regards indigestion is plain. If tests are made indican will be found oftener than either sugar or albumin, for the conditions which produce it are common. There are a number of tests for indican which may be employed, but the following is as satisfactory as any: About a drachm of urine is poured in a test tube and an equal amount of strong hydrochloric acid added; to this two or three drops of a 1 per cent. solution of permanganate of potash are added, when a blue ring of indigo is found. If chloroform is added, this will be carried to the bottom of the tube and the chloroform colored blue as the indigo is soluble in chloroform.

The proper dietetic restrictions in the treatment of functional indigestion are of the greatest importance in securing success, but first the alimentary canal must be thoroughly emptied. For this purpose chologogues may be used, or one or two teaspoonfuls of glycerine in an equal amount of sweet oil every four hours until a satisfactory effect is produced. Then in way of food we should avoid that which is difficult to digest, or leaves a large residue to pass through the intestines and be subject to putrefaction. Normally, we require a mixed diet for perfect nutrition and the amount of the vegetable foods should predominate. But animal foods are always more easily digested than vegetable, and they also leave less residue as foreign matter. Hence, in difficult or disturbed digestion animal foods should be mostly used, while course and bulky vegetable foods should be avoided. But we should not go to the extreme of using animal foods alone, for the system requires some vegetable constituents for blood formation and without them anemia will result. This fact should be remembered in treating diabetes mellitus. Of animal foods beefsteak stands at the head; it is digested and utilised to the extent of about 98 per cent., according to one authority, while raw eggs are second, 97 per cent. and milk third at 96 per cent. On the other hand, oat meal, in diseased conditions, is practically indigestible and its laxative effect in health is largely due to the great proportion of waste matter. Besides, it is particularly prone to putrefaction if evacuation does not soon take place. Fruits are also bad, as a rule, for persons with feeble digestion, because they are apt to set up fermentation, with formation of toxins, which finally attack the proteids and thus destroy the most important elements of nutrition.

The presence of urates or uric acid in the urine in increased amount, denotes either increased retrograde tissue changes or the failure of complete oxidation of the proteids of the food. If the urates, without obvious structural cause in other parts, are in sufficient quantity to deposit upon cooling of the urine, then it is evident the amount of the nitrogenous elements ingested is in excess of the ability of the digestive apparatus and that that excess, as it passes through the portal circulation, is changed by the liver to urea. Hence, if due to digestive trouble the proper course would seem to be to cut down the amount of proteids ingested, and at the same time to stimulate intestinal digestive activity. As a rule, fats should also be avoided, for they are apt to increase the stomach trouble; and starch and sugar should be reduced as much as possible. But in many cases the experience of the patient as regards food is a safe guide to follow.

As regards drugs I have little to say at this time. Of course the bowels should be kept active by laxatives and of these each one has his favorite. Obviously, it is impossible to specify remedies in a general way for the indigestion, for the causes are various and their treatment dissimilar. But we can say that pepsin is falling into disuse and that pancreatin is taking its place. Caffeine or coffee is said to double the activity of pancreatin, but of this I think there is some doubt. Ox-gall is not used as much as it should be, and alkalies are not employed by many with a clear understanding of their indications. Acids and gastric sedatives have their uses and can not be supplanted; as, likewise, lavage and electricity. But the profession has not generally learned that many cases are pure neuroses and must have nerve sedatives and measures to build up the general health.

If physicians would use the same care and intelligence in dealing with the functional digestive disorders, as they do in other diseases, these cases would not stand as a reproach to the profession, and we would not so often hear the expression that "the doctor can do nothing for dyspepsia."

IT IS reported that the French minister of war has ordered lectures to be given at army posts on the dangers of drunkenness.

A BRIEF RESUME OF THE GROSSER ANIMAL NATURE AND ITS APPLICATION IN MEDICINE.[1]

By G. N. JACK, M. D., Depew, N. Y.

THE finer phenomena of animal nature or life and their results, are being and have been thoroughly studied through all phases from their origin to the completion of the circle of their existence, by the embryologist, the physiologist, the chemist, the anatomist and the pathologist.

These different scientists have nearly mastered the mechanism of animal life, while the grosser part of our animal nature, or the engineer that runs the engine, that has been so carefully studied as intelligence, including thoughts, desires, work, longings, ambitions and the termination of our existence, has been left to take care of itself, or to be governed by the ignorant and superstitious.

If, owing to the peculiar nature of our scientific studies, investigation and professional duties, we have been able to acquire positive knowledge as to the origin and conclusion of each individual animal life, such knowledge should be freely discussed at our medical societies, heated, hammered and forged into the scientific circle of life, thus beautifully completing it. Leaving this circle unforged not only mars the beauty of our science, but it is dangerous to it and greatly cripples the utility of our profession, for springing through this gap we behold such monsters as christian science, clairvoyancy, witchcraft, hoodooism and the masturbation quack.

There is much knowledge that the medical mind must be schooled to that would be harmful and dangerous in the hands of the average layman, but I have enough confidence in the members of my profession to believe that the thoughts here advocated will be kindly and confidentially received.

It is not the province of this paper to antagonise or belittle the church, that time-honored institution that has been directly instrumental in elevating humanity to the high plane it now occupies, but institutions that do not advance with civilisation must eventually be a detriment to intellectual progress. And today the harm done through the diseased imagination, arising from the teachings of some of the deluded and hysterical sects, is the production of a soil fertile to the growth of the christian science curse, is too graphically pictured before the medical mind for toleration.

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[1] Read at the annual meeting of the Medical Society of the County of Erie, January 8th and at the Central Medical Association, Lancaster, N. Y., February 4, 1901.

Christian science is so far removed from animal nature as to constitute a form of contagious insanity, and as it is our duty to protect communities against contagious diseases, it falls upon us to seriously consider this subject.

Being a member of the board of education of Depew, I can proudly say that I have been directly instrumental in weakening the medium through which this form of insanity develops, by instituting in our schools morning exercises consisting in a talk by the professor, discussing the natural and cultivated qualities most prominent in the production of noble lives, the reading of current topics and the singing of patriotic songs in lieu of devotional exercises, and it would be advisable to institute in some of our churches a similar mode of weekly instruction.

With all that might be said against Catholicism it, from a medical standpoint, has a redeeming quality in that it offers a sustaining power to suffering women that no other religious institution can ever hope to rival. For through the confessional weak women give vent to their natural animal feelings, and are ever encouraged by the priest, who is usually a well-read man, of good judgment, ever keeping abreast with the times. The result of this sort of vent to and constraining power over women, is most beautifully illustrated by the fact that any true Catholic woman would rather die than produce an abortion. It is also proverbially known that Catholic families have large numbers of children.

The physician, in that he continually meets undisguised nature in consultation, is in this respect placed in a similar attitude to that of the priest, and if the physician could exert over his non-catholic patients the same influence that the priest has over his people, he would be doing much toward stamping out the greatest crime of the age, childlessness.

Self-preservation and perpetuation is one of nature's greatest laws, and I have found it very useful in encouraging healthy, newly married people, to resolve to raise as large a number of children as they reasonably can. I never yet have failed to convince my patients that it was their most noble duty and that it should be the highest aim and greatest pride of their lives to raise, feed, clothe, educate and develop as many children as possible. It does not take one long, when armed with a few of nature's arguments, to convince his patients of these truths, for the frail, artificially constructed no-children ideas cannot, in the minds of those who have intelligence enough to conceive an idea, long resist the true steel of nature's laws when once brought face to face with them.

It is my custom to receive patients soliciting advice for the prevention of pregnancy kindly and sympathetically, thus gaining their confidence; I then proceed in the most simple manner possible, without in any way conflicting with their religious views, to prove to them, by explaining a few of nature's laws, that it is for their own selfish interest to raise as many children as possible, for it is through our progeny that nature secures for us perpetual life, with a most accurate preservation of all our notions, ideas, intellectual and physical development, peculiarities, and the like.

Then, as an illustration, to more forcibly impress upon their minds the point that I am trying to make, I usually tell them this story: When a boy down on the farm, a distant uncle once sent me two kernels of a rare and very choice variety of pop-corn. It is needless to say that these two kernels of corn were planted in the choicest earth, securely guarded and daily watched. When they reached the age of maturity and began to show evidences of earing, my childish curiosity could no longer forbear an investigation. The investigation proved disastrous to the tender budding ear of one stalk and in a few days it withered up and dropped to the ground. These two sister stalks, one pregnant and the other an abortionist, continued to grow side by side until old age caused them to naturally and resignedly part with that force known as life, and to gradually disintegrate into the chemical elements that composed them. As no one advocates a heaven or a hereafter for corn, it is evident then that the stalk of corn that aborted, in so doing forever lost its individuality and its only opportunity or hope of ever again participating in corn affairs; while the stalk that successfully bore the matured ear secured for itself as many chances for perpetual and improved life as there were healthy kernels on that ear.

After this corn story, I usually tell a similar story of some animal, as the horse, and gradually lead up to the life story of man and nature's mode of its perpetuation. Men are more willingly and easily convinced of the truth of these arguments than women, and for this reason it is always best, if possible, to have the husband present.

Many women, unless sustained by some convincing argument and the ardent desire of a respected husband, will take great chances, and repeatedly perform abortions upon themselves rather than endure the deprivations accompanying motherhood. One patient of mine, to my positive knowledge, performed an abortion upon herself three different times, and once upon her sister and a neighbor woman, and each of these five abortions was accompanied by retained putrifying secundi, that would soon have caused death were it not for the vigorous application of the curette.

Nature has wisely endowed the female of all animals with a strong, irresistible, sexual desire, which, if left to nature, will ever be periodically gratified until pregnancy supervenes. Education has taught women that the gratification of this passion usually produces pregnancy with its resultant pain, suffering, confinement, extra work in caring for the infant, and debarment from many of society's charms and advantages. It is a self-evident fact, then, that if a woman be endowed with the power to prevent pregnancy she will naturally gratify her passion, and naturally prevent pregnancy. For this reason no woman should ever be allowed to study or practise medicine, as it is placing her in an extremely dangerous position, alike from a personal, professional and national standpoint. The truth of these statements is proven beyond doubt, by the fact that few, if any, practising women physicians ever become mothers.

Owing to this peculiar nature of women our medical colleges are either intentionally or unintentionally doing an unchivalrous act in encouraging women to become physicians.

When the American government, like the French, become alarmed over the barrenness of her people, it will not take Yankee ingenuity long to place the responsibility, nor to contrive effective measures of reform, and when such a time comes, it would be far more honorable, and desirable, to be a galley slave than to unfortunately be affiliated with the designedly childless class.

It is also a physician's duty, when opportunity supervenes, to reach the innermost thoughts of boys and young unmarried men and thus ascertain whether or not they are, as is usually the case, while shunning an imaginary evil, gradually sinking into degeneration, infection, and corruption; if so, the physician should kindly show them their mistake and make them familiar with nature's laws.

Through the corrupt criminal and selfish teachings of the masturbation quacks who boldly use our mails and newspapers for the purpose of deceiving, many a well-meaning and sensitive youth of our country has been burdened with an imaginary sin to such an extent that he has been driven to drink, houses of immoral fame and suicide.

Many a high-spirited, well fed, healthy, full-blooded, robust youth has walked into my office, burdened by a mental condition bordering upon acute melancholia and with bowed head and tearful eye, proceeded to open up his life and finer sentiments to me for inspection and advice.

The story of these deceived youths has a marked similarity and usually runs as follows: He has frequently read in Dr. so and so's masturbation book, that if a young man masturbates or has wet dreams he will have lost manhood, weak memory, numerous other diseases and eventually go crazy. If he does not masturbate once a week or so, he will have wet dreams, he therefore is in a wretched condition, for he does not want to marry yet for several years; he knows the danger of having coition with immoral women, and they are disgusting to him; he has too much respect for woman hood to seduce a virtuous woman. He feels that there is no hope for himself, and that he is doomed to become a moral and mental wreck.

Such an unfortunate and self-respecting youth is deserving of our best and most considerate attention. Explain to them the character and object of the book, from which they have gotten their ideas; go minutely over the anatomy, physiology and function of the male generative organs, thus enabling them to understand that in the vigorous adult, they will naturally vent themselves once in ten or fifteen days.

Most young men of this nature will worry themselves nearly if not actually crazy, over masturbation practised once in two weeks or so. But if they have an opportunity to vent themselves on a female will have coition two or three times a day and feel that they are doing quite the proper thing. It does this class of men an immense amount of good and acts as a safety-valve to society and civilization, to let them know that masturbation, if practised with the same degree of prudence is no more harmful than coition.

Nature has so constructed the female of all animals that she does not desire, nor will not, if left to her own natural inclination permit coition, only at such periods as are most congenial to her conception.

They who have coition at these periods only, and if need be practise masturbation at other times to quell their passion, are much more true to nature's laws, and more honorable, than those who have coition time after time, utterly regardless of nature.

So long as physicians ignore these subjects and fail to reach the hearts of their patients, quacks will thrive.

(*Concluded in May Journal.*)

CLINICAL QUANTITATIVE ANALYSIS OF PROTEIDS IN STOMACH CONTENTS.[1]

By A. L. BENEDICT, Buffalo, N. Y.

IN THE examination[2] of stomach contents, thus far we have gone all around the real function of the stomach, without testing as to how well or how poorly that function was performed. We have learned how much hydrochloric acid remained in excess of that taken up by food, whether a similar excess of ferments was present, how much the stomach had interfered with starch digestion, when the stomach passed its contents on to the small intestine, but we have ignored the direct issue of the amount of albumin transformed into albumoses and true peptones.

The method demonstrated to you today consists in the successive precipitation of the proteids in solution in the stomach contents and their approximate measurement, by centrifugalising the three precipitates, acid albumin, albumoses and peptones. At first thought, this would seem to be a very simple matter, but I can assure you that it required a large amount of research, including interviews and correspondence with chemists, and of laboratory experiment, to place it on a practical, clinical basis. Strangely enough, no analytic chemist seems to have undertaken the problem before. Any physiologic chemistry contains directions regarding the reactions of the various forms of nitrogenous matter, but, in practically every case, it was assumed that an unlimited supply, usually prepared artificially, was available. In all instances, the tests were given with the implicit understanding that the investigator would perform them as a matter of scientific curiosity and not with the practical, analytic object of separating and quantitating the ingredients of a mixed mass of proteids. For several years, it has been my custom to take up some special problem, either in physical diagnosis, applied chemistry of digestion, microscopic technic or some other theoretic topic that seemed likely to yield practical results if properly applied, and to make a winter's study of it. But the problem of proteid digestion in the stomach has occupied two winters, simply because my ignorance of certain scientific details of chemistry compelled me to grope in the dark while, on the other hand, lack of familiarity with the condition of medical practice, prevented chemists from giving me exactly the information which would have been of the greatest use. I mention this point only to urge a more general coöperation between the medical scientist and the medical practitioner, in attacking the many problems that lie before us and whose solution will make medicine more and more an applied science, as well as an art.

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[1] Read at the thirty-third annual meeting of the Medical Association of Central New York, held at Rochester, N.Y., October 16, 1900.

[2] Dr. Benedict gave a demonstration of his original centrifugal method of quantitating proteid digestion in stomach contents, for which he was awarded the medal of the American Medical Association at its meeting in 1900. Dr. Brown, of Rochester, assisted in the tests.

One of the difficulties in the way of careful analysis of chyme is the small amount obtainable—not usually over eighty and often less than thirty cubic centimeters, after the ordinary test meals. Free HCL and total acidity can be estimated at one titration, if we are careful and meet with no mishap. Combined acidity requires another titration, proteids another and at least a small quantity must be reserved for various qualitative tests. While the tests for acidity are best applied to unfiltered chyme, proetolysis requires a clear filtrate and a considerable loss occurs on account of the mass left on the filter. As a matter of practical experience, I have found that the tests for proteids must be made with ten or sometimes only five cubic centimeters. Filtration, especially if much mucus is present in the stomach contents, is a tedious process. I have tried all sorts of expedients, such as the use of absorbent cotton, separation by a colander, and the like, but have not succeeded as yet in obtaining rapid filtration. By centrifugalising the stomach contents, they can be readily separated into three layers, the lower one consisting of undigested food, the upper one of butter and mucus, the middle one of comparatively clear liquid. By removing the upper layer with a swab, the middle one can be decanted and filtered in the usual way, without the hours' delay required if the stomach contents are simply poured into the filter.

To save your time, I have brought with me ten cubic centimeters of filtered stomach contents. Acid albumin is thrown down by boiling and, after cooling, is centrifugalised. You can see the firm white sediment of albumin reaching up to the second mark on the centrifuge tube. This represents 2 per cent. of firmly packed albumin by volume, equivalent, as I have found by actual drying and weighing, to about a quarter or fifth as much of dry albumin. This is the normal maximum.

There is no natural separation of the various steps of the peptonising process but, by common consent, chemists consider that everything proteid not precipitated by ammonium sulphate in saturated solution is a peptone, and that everything between albumin and peptone may be called albumose. Of course, the process of peptonisation could be further subdivided by using different reagents. To precipitate albumose—or rather albumoses—I add one gram of ammonium sulphate to the ten cubic centimeters of decantate, dissolve the salt by heat and cool. As the mixture cools, you will notice that a turbidity forms, due to albumose. This is very light and is precipitated only with the greatest difficulty; in fact, I do not usually try to clear it absolutely by the centrifuge, but simply estimate what is thrown down by 10,000 revolutions. Here we have a mere trace which is normal, although 1 per cent. may be taken as the normal maximum.

To precipitate peptones, I employ phosphomolybdic acid, which makes a very bulky precipitate. I should prefer tannic acid, the precipitate from which is only about a sixth as bulky and tannic acid, is the reagent usually recommended by chemists, even in experimenting with stomach contents, but they forget that tannic acid also precipitates starch, which is almost invariably present in chyme. This little oversight alone cost me several months' time, as it necessitated throwing out quite a series of observations. You note that the precipitate with phosphomolybdic acid amounts to two cubic centimeters in ten. Normally, this precipitate is from 10 to nearly 30 per cent. of the filtered chyme. This relatively enormous bulk suggests that something else than peptones is precipitated, and it was only after careful search of chemic literature and consultation with chemists that I became convinced that we could rely on this reagent. Phosphomolybdic acid precipitates alkaloids and certain biliary constituents, but it is impossible that there should be anything of a nonproteid nature in the filtrated chyme, in sufficient quantities to interfere with the result desired. For instance, to show that ordinary saline matters and waste that might be present in the stomach could not cause a precipitate, we need only add phosphomolybdic acid to urine, when we find a reassuring absence of any precipitation.

You will ask what practical result we can derive from such an examination. The method is comparatively simple and by it we can tell exactly how much digestive work the stomach is accomplishing. In general, we shall find an excess of lower forms of proteids in cases of subacidity and deficient formation of ferments. For instance, in cancer, we should expect at least 2 per cent. of acid albumin, probably as much albumose and only 5 or 10 per cent. of peptone, by bulk. We must also bear in mind that an excess of an end-product may mean either usually good digestion or poor absorption.

In the present instance, the total acidity was 96°, and the free hydrochloric acidity 34°, which are within normal limits. The case is one of mild gastric dilatation, but at present, perhaps due to stimulation of function by strychnine and reinforcement by the administration of hydrochloric acid, digestion is progressing normally.

Clinical Report.

MENTAL ABERRATION, CONSEQUENT UPON PELVIC DISEASE.

By Dr. L. G. HANLEY,
Gynecologist, Buffalo Hospital of the Sisters of Charity.

Reported by CHAS. WILSON, M. D., Interne.

MRS. R., aged 25, admitted to hospital July 18, 1900; married 9 years; two children; youngest child aged 6 years. Age of first menstruation, 13. Has been troubled with dysmenorrhea since her arrival at puberty. She was brought to the hospital suffering with severe pain in head. Complained also of severe pain in back and abdomen; height, 5 feet 4 inches; greatly emaciated and anemic; is greatly depressed and would sit for hours staring into space and melancholic. During menstrual period becomes violent, and always feared that she may do harm to herself or children. Says she likes to be alone, but afraid that something terrible will happen if left by herself.

Examination shows a laceration of cervix, retroflexion of uterus, with an enlargement of both ovaries. Patient prepared for abdominal section and trachelorrhaphy. When the abdomen was opened the uterus was found to be bound down posteriorly and each ovary about the size of a small orange and of a hematomatous nature. Both ovaries were removed and uterus anchored to anterior abdominal wall. The bilateral laceration of cervix repaired. Patient remained in hospital thirty-two days, during which time she displayed no evidences of uneasiness, mental or physical, beyond the ordinary. She was allowed to go home and has returned at intervals of three weeks. She says at present time (March 11, 1901) that she feels perfectly well, sleeps well, which for four years she has been unable to do excepting in a disturbed manner; that she weighs 140 pounds and with the exception of slight attacks of flashes of heat and cold, which come on about once a day, is perfectly well.

There seems to be no doubt but that the mental psychosis in this case was due in great part to the condition of pelvic disease, and that return to normal mental condition was due to operative interference.

Society Proceedings.

BUFFALO ACADEMY OF MEDICINE.

Section on Pathology, January 15, 1901.

REPORTED BY F. W. McGUIRE, M. D., Secretary.

THE regular meeting was held at the Academy rooms, Tuesday, January 15, 1901, Dr. EUGENE A. SMITH in the chair, twenty fellows being present.

The minutes of the previous meeting were read and approved.

Dr. GROVER W. WENDE presented a case of multiple pigmented sarcoma of the skin, cured by injections of arsenic every other day, commencing with 5 drops and increasing to 18, and continuing the treatment for a year and a half.

Dr. MARSHALL CLINTON presented a case of sarcoma occurring in a scar one year after removal of a lipoma. It is now six months after removal of the sarcomatous growth and there is no return.

The essayist of the evening was Dr. J. C. JOHNSON, assistant pathologist at Cornell University, who read a paper entitled,

SARCOMA AND SARCOID GROWTHS OF THE SKIN.

Dr. Johnson divided the growths into three groups: (1) True sarcoma; (2) the leukemic group; (3) sarcoid growths, and taking each group he discussed them separately.

First—Sarcoma he divides into spindle-celled, round-celled and giant-celled or myeloid. These are sometimes pigmented. The spindle-celled are the most common. Some spindle-celled growths are rapidly fatal, while others, again, indistinguishable from these, microscopically, run a comparatively indolent course. Any swiftly growing sarcoma, however, especially if it contains autochthonous pigment, has the gravest prognosis. Encapsulation, on the other hand, improves the outlook, since it limits the extension and permits of removal.

He doubts that the spindle-celled variety arises exclusively from the adventitia of the vessels, and sees no reason why the connective tissue corpuscles are not capable of taking on malignant action. The myeloid form occurs in the skin only by extension from the periosteum.

In discussing treatment he mentioned surgical interference as about the only hope; this at times did damage, as when the tumor was not all removed and a more acute process would develop. He also mentioned Coley's toxin. He thinks the nonpigmented spindle-celled sarcoma offered the best chance for its success. Arsenic he thinks is of questionable utility, but is sometimes of advantage.

Second—He discussed the leukemic group. There he includes leukemia, pseudo-leukemia, malignant lymphoma, variously styled lympho-sarcoma, and small round-celled sarcoma. He pointed out how great a task it was to differentiate these growths, the blood count offering some value, especially where leukemia had reached its well marked stage of leucocytosis. Histologically they are very similar. Treatment offers very little hope; operations are useless; Coley's toxin is ineffectual. Arsenic is usually of no avail, but in some cases proved beneficial.

Third—Sarcoid growths, under which he considered granuloma fungetis, multiple idiopathic pigmented sarcoma, sarcomatosis cutis and multiple benign sarcoida. Granuloma fungetis is perhaps the most extraordinary disease to which the skin is subject. He divides its course into three periods: (1) Premycosic or prefungoid; (2) stage of infiltration; 3 that of tumor formation.

The treatment lies in holding the disease in check as much as possible and making patient comfortable. Arsenic holds a high place. He gave descriptions of each of the members of this group. The treatment was mostly injections of arsenic, which offers good results in some cases.

DISCUSSION.

Dr. H. U. WILLIAMS thought Dr. Johnson should be congratulated on his very clear classification of sarcomatous growths of the skin. He said sarcoma was a dumping ground for growths; when it was not known what to call them they were usually called sarcoma. He thought it was a good arrangement to eliminate a certain number of sarcomatous growths by putting them in a group by themselves. He said some were malignant and some were not; the whole subject in general was most unsatisfactory. He has seen sarcomatous growths in dogs.

Dr. A. E. DIEHL liked the author's simple classification, but thought that sarcoma was rare; he had only seen three cases. He said that leukemia and pseudo-leukemia were certainly not sarcomas.

Dr. HARVEY R. GAYLORD wished to express his satisfaction with the paper. He thought Dr. Johnson's classification was very clear and simple. He also thought that embryological growths could not be taken into consideration in the classification of sarcomatous growths, as we know little if anything about them. He has examined several specimens of sarcoma in animals.

Dr. M. HARTWIG cited a case of Hodgkin's disease, which improved phthisis set in. The phthisis subsided and Hodgkin's disease returned more pronounced.

Dr. JOHNSON, in closing, said he was very much gratified at the discussion. He further remarked that the literature on sarcoma of skin was very unsatisfactory. He thought it was necessary to have the whole tumor when making an examination for sarcoma.

The next paper was by Dr. GROVER W. WENDE, entitled,

URTICARIA.

The author considers it one of the most interesting of diseases, because in many cases it can be evoked at will and a study of its pathological process can be made. In this connection he described the evolution and devolution of factitious urticaria, and went quite minutely into the physiological phenomena. On this he cited opinions of different authors and gave as his own opinion that it was caused by a stimulation or irritation of the plexiform arrangement in the skin itself.

He said that urticaria was not confined to the skin alone, but that it sometimes affects the mucous membrane, and cited Sir Andrew Clark's opinion regarding the phenomena of asthma. He then discussed some of its less known causes: hydateds, parturition, passage of uterine sound, pregnancy, menstruation, and the like. He then described unusual cases: (1) a case of urticaria hemorrhagia; (2) a very chronic case, which appeared to take its origin in chickenpox; (3) a case of urticaria pigmentosa; (4) a giant urticaria.

Treatment resolves itself into two points: (1) Discover cause and remove it; (2) mitigate the effects. Regarding causes we must not forget the possibility of local irritation as fleas, bugs, pediculi, irritating clothing, and the like. Regarding indirect irritants, as unusual articles of diet, the administration of a prompt cathartic or saline laxative will usually cure the disease. In chronic cases a saline laxative, mineral acids, rhubarb and soda, salol, resorcin and other intestinal antiseptics, are of service in many cases. In this class of cases the diet must be regulated, each case being a study of itself, probably a milk diet with other articles added with care, will be most serviceable. Alcohol in all forms must be stopped.

If gouty or rheumatic, treatment for this condition must be adopted. If periodical, quinine may do good. Salicylates often prove beneficial, even when there is no evident rheumatic tendency. In neurotic cases, arsenic, bromides, belladonna, antipyrine or galvanism may be tried. In obstinate cases patient should be sent from home.

Local treatment, parts may be sponged with alkaline lotions; sometimes acid lotions will give relief, as vinegar and water, carbolic acid and vaseline, alcohol and water, menthol 1 to 10 per cent., chloral and camphor, one-half to one ounce rubbed together and added to starch or unguentum simplex. Baths with bran or bicarbonate of soda are frequently useful.

DISCUSSION.

Dr. A. E. **Diehl** said that Dr. Wende had gone so thoroughly into the subject that very little was left for discussion. He reported a case that proved irrisistible to all medication which was cured by leaving the city, *i. e*, by change of environment.

Dr. **Johnson** believes that people have a constitutional predisposition to urticaria caused by increased coagulability of the blood. He believes icthyol to be absolutely useless in this disease.

The section adjourned at 11 p. m.

Section on Medicine, February 12, 1901.

Reported by JULIUS ULLMAN, M. D., Secretary.

The fifth regular meeting of the Section of Medicine, was held in the Library Building, Tuesday, February 12, 1901, Dr. **Eli H. Long** presiding.

Drs. **Charles Cary** and **Julius Ullman** reported a case of psychic equivalent of epilepsy. The patient is a contractor, 38 years of age, and born in this country—New York City; the father died of a paralytic stroke at the age of 56; the mother died of what the patient termed "rheumatism of the heart." One brother when a child had fainting spells and many specialists in New York were consulted, but gave little hopes of cure. He is, however, now living and well. The patient suddenly lost all remembrance of self consciousness from Friday at noon in New York City, until he found himself in a private room of the Buffalo General Hospital the following Wednesday evening. The last remembered by him is that being worried about an invalid wife, and also being mentally exhausted as the result of active participation in a trying political campaign; he entered the elevated train in New York City to go to his home. During the time of the loss of his self-consciousness he undertook a railway journey from that city to Buffalo. (Lesegue and Legrand du Saulle reported a case where the patient took passage at Havre and did not come to himself until he reached Bombay.)

The patient was found by the police aimlessly wandering about the streets and sent to the hospital. During the time that he was in the hospital it was impossible to get any account from him. He repeatedly called for the "senator" and for his wife, but there was complete amnesia as to names or location. Wednesday night he regained consciousness and was much surprised to find himself in Buffalo. While driving last summer he struck his head and was unconscious for several hours, since which he talks a great deal in his sleep. On the grounds of this peculiar history the diagnosis was made and substantiated by Dr. James W. Putnam. Since the patient's return to New York City he experienced another slight attack three and one-half hours in duration, and is to undergo an operation for the relief of these attacks.

Reference was made in the paper to the case of Sadie McMullen, who was observed at the Buffalo State Hospital as a case of epileptic insanity and which was described July, 1891, in the *Journal of Nervous and Mental Diseases* as a medico-legal case of psychic equivalent.

Dr. J. W. **Grosvenor** read a paper, with a record of a case, entitled,

PEMPHIGUS.

A rare disease, characterised by appearance of blebs or bullæ on external surface of body and mucous membranes. Acute and chronic. Acute occurs both in children and adults; chronic exclusively in adults. Acute form contagious and epidemic. Most important chronic forms are P. vulgaris, P. vegetans and P. foliaceus. The basal cause of pemphigus not known with certainty. Quite probable that it is due to a microörganism. Gibier has found bacteria in contents of the blebs. Chronic forms in debilitated adults almost uniformly fatal. Recovery from P. vegetans and P. foliaceus is exceedingly rare. Children of vigorous constitution and healthy environment generally recover. Treatment consists of quinine and arsenic in large doses persistently followed and soothing powders locally. The author gave a record of a typical case of P. vulgaris in a woman 70 years of age. The case had a favorable issue after two years of treatment with quinine and arsenic internally, and borated talcum powder externally.

DISCUSSION.

Dr. **Grover W. Wende** demonstrated charts and plates of this disease and says the disease is an unusual one, and spoke of the confused state of the classification of this disease and the difference of opinion as to conditions regarded by Kaposi and his school and that of the American dermatologists.

Dr. **Alfred Diehl** spoke briefly of an outbreak of impetigo contagiosa as seen by him among babies and nurses at the Erie County Hospital.

Dr. **Grosvenor** closed the discussion.

Dr. **Albert E. Woehnert** read a paper

ON THE VALUE OF BLOOD EXAMINATIONS BASED ON FIVE HUNDRED EXAMINATIONS.

He said that the importance of blood examinations as a means of differential diagnosis in disease is of recent time. In counting blood the sources of error may be faulty technique or the daily variation in blood. The selection of a certain hour to make a blood count is important, for there always is a physiological leucocytosis after meals. The corpuscles should be counted in separate counters. In the writer's experience the hematokrit is not an accurate instrument to count the corpuscles. Most instruments for the estimation of hemoglobin are based on a color test and the results obtained depend, therefore, too much on personal equations. The best results have been obtained by using the specific gravity method of Hammerschlag. Fibrin is increased in inflammatory conditions. Leucocytosis can often be detected in unstained specimens.

The blood is diagnostic in pernicious anemia, chlorosis, malaria and leukemia. In twenty cases of pernicious anemia examined, the average number of reds were 1,342,270; whites, 4,241; hemoglobin, 34 per cent.; hemoglobin index, 125, and specific gravity between 1,040 and 1,052. There was macrocytosis and poikilocytosis with nucleated reds. Pernicious anemia must be differentiated from the secondary anemia of cancer.

Chlorosis.—Average number of reds, 4,434,000; whites, 7,157; hemoglobin, 43 3-4 per cent.; color index, 63 per cent. The red cells varied in size and shape and plainly showed the lack of hemoglobin.

Leukemia.—The blood is very characteristic; the reds are reduced, whites show an enormous leucocytosis, the large proportion of myelocytes being very characteristic. The reds show many nucleated cells. The character of leucocytes in the lymphatic leukemia was mentioned and a case was reported in which the reds fell from 5,000,000 to 800,000 in three months and the whites were reduced from 34,000 to 600, due to a secondary and terminal infection. Secondary anemia is the result of known causes, and the study of the leucocytes is important in this form of anemia. Very often the presence of leucocytosis or a leucopenia is of diagnostic value. The red cells are not so much disturbed in size and shape as in the essential anemias, and hemoglobin reduction closely follows the reduction of the red cells.

The anemia of malignant disease was described. Blood examinations are of great value in appendicitis. In fifteen cases there was a leucocytosis ranging from 10,000 to 25,000 and in all cases over 15,000 pus was found.

The blood of syphilis, tuberculosis and malaria, was described. The prognostic value of blood in pneumonia was spoken of; an eosinophilia, showing a post critical stage; so also the increase in eosinophiles in trichinosis and the inflammations of the skin and mucous membranes.

DISCUSSION.

Dr. I. P. **Lyon** insists on the hour of examination; after a meal there may be a variation of 33 per cent. It is well therefore to examine before meals. He believes that blood examinations are of the utmost importance and that the adjuvant to diagnosis has come to stay. In very severe forms of pneumonia or appendicitis, there is not much leucocytosis, and this may be regarded as a sign fatal to prognosis. He referred to a differentiation between an inflammatory condition of kidney—pyelonephritis or surgical kidney—in which there is a marked leucocytosis and fibrin increase, whereas in malignant disease of the kidney there is leucocytosis without the increase of fibrin.

Dr. Lyon also referred to a case where he found a leucotysosis of 30,000, and which on operation proved to be a perinephritic abscess.

Dr. A. L. **Benedict** uses the centrifuge and hematokrit for purposes of estimating the number of reds and whites, and in his experience this method is easy and quite accurate. He does not believe that the specific gravity of blood has more to do with hemoglobin than the specific gravity of urine has to do with the estimation of urea. He spoke of the methods used by him to fix slides. According to the ordinary stains bat's and rat's blood don't stain. He believes that we will soon have to investigate the blood plasma and chemistry of the blood.

Dr. **Woehnert** closed the discussion.

Section on Ophthalmology, Otology, Rhinology and Laryngology, February 18, 1901.

Reported by GEORGE F. COTT, M. D., Secretary.

Sixth meeting, Monday, February 18, 1901. Dr. **Frank Whitehill Hinkel** in the chair. The chairman called the meeting to order and Dr. **Millener**, secretary pro tem., read the minutes of the previous meeting, which were approved.

Dr. J. C. **Clemesha** presented a case of

MACULAR CHOROIDITIS WITH CHOLESTERIN CRYSTALS.

DISCUSSION.

Dr. **Blaauw**.—The case Dr. Clemesha presents, I consider to be retinitis hemorrhagica. I would like to ask Dr. Clemesha why he calls it choroid retinitis? The white plaques do not say anything for an affection of the choroid; they are frequently met in other forms of retinitis. He said further that it was a rather peculiar picture of the choroide state with obscure pigment. He never saw such an affection.

Dr. **Bennett** agreed with Dr. Blaauw.

Dr. Hinkel asked whether any such lesion was noticed following influenza.

Dr. **William** C. **Krauss** then read a paper on

THE CLOSE RELATIONSHIP BETWEEN THE EYE AND NERVOUS DISEASES.

This close relationship is due to the following reasons: (1) Because of the close continuity of the two organs; (2) the eye receives a large number of important cranial nerves, anatomically extending from the cephalic border of the chiasma, to beyond the caudal border of the Pons, an area equal to one half the basilar surface of the brain; (3) the size and expansion of the optic nerve into the retina which reflects by its complex structure many of the disorders of the brain; (4) the varied physiology of these nerves being motor, sensory, trophic and special sense in function; (5) the intimate connection between the arterial and lymphatic supplies of both eye and brain.

Nervous diseases are expressed in the eyelids, either by (1) paralysis of levator palpebræ superioris, producing ptosis; (2) paralysis of the oricularis palpebrarum, producing lagophthalmos; (3) spasm, and (4) trophic disturbances.

Paralysis producing ptosis may be due to (1) congenital disturbances; (2) oculo-motorius disease; (3) apoplexy into the angular gyrus; (4) brain syphilis; (5) reflex disturbance; (6) sympathetic nerve disease; (7) locomotor ataxia; (8) hysteria; (9) basilar disease; (10) corpora quadrigemina disease; (11) crus cerebri disease, and (12) asthenic bulbar paralysis.

Paralysis producing a lagophthalmus is found in Bell's palsy and diplegia facialis. Spasm of the eyelids is met with in (1) blepharospasm; (2)spasm nictitans; (3) tic convulsif; (4) exophthalmic goitre, as Von Graefe's sign and Stelwag's sign.

Trophic disturbances are found in myxedema, angio-neurotic edema and acromegaly. The orbit in nervous diseases is expressed either by abnormality in size, as (1) microphthalmus and (2) macrophthalmus, both being congenital and significant of degeneracy, (3) enophthalmus and (4) exophthalmus. Paralysis of the orbital muscles producing strabismus is found in disease of the 3d, 4th and 6th nerves, ophthalmoplegia, locomotor ataxia and exophthalmic goitre. Spasm of the orbit producing nystagmus is found in disseminated sclerosis, Friedreich's ataxia and syringomyelia.

The pupils, disc, retina and vision were briefly considered and the following conclusions drawn regarding the relationship between choked disc or optic neuritis and brain tumors: (1) Optic neuritis is present in about 90 per cent. of all cases of brain tumor; (2) it is more often present in cerebral than in cerebellar cases; (3) the location of the tumor exerts little influence over the appearance of the papillitis; (4) the size and nature of the tumor exert but little influence over the production of the papillitis; (5) tumors of slow growth are less inclined to be accompanied with optic neuritis than those of rapid growth; (6) it is probable that unilateral choked disc is indicative of disease in the hemisphere corresponding to the eye involved; (7) it is doubtful whether increased intracranial pressure is solely and alone responsible for the production of an optic neuritis in cases of brain tumor.

DISCUSSION.

Dr. **Blaauw.**—Papers are of two kinds: First, the kind that must be read beforehand in order to be able to discuss it properly; second, that which we can hear and discuss immediately afterward. Dr. Krauss's paper is of the first kind. Notwithstanding this, I will say a few words to show my appreciation.

The Doctor says in his paper, "the diagnosis of hysteria is easy." I do not agree with him. In the early stages of tabes, for instance, we find ptosis or a paralysis representing paresis of one of the external ocular muscles, which improves without treatment, but may or may not relapse. How often has the diagnosis of hysteria not been made in such cases? It is the same in the early stage of multiple sclerosis.

From another standpoint the question of ptosis is of interest. Formerly we used to diagnosticate a nuclear affection as soon as a single or several external ocular muscles, innervated by a common nerve, became paralyzed. The history of ptosis shows us that we have no right to do this, because in ptosis we might find a vascular affection. I do believe that monocular spasms of the eyelids are the result of no local ocular cause, but may be the result of a cerebral affection.

As to the third class of cases referred to in this paper, I think that the diagnosis of neuritis must be made in the direct image. We accept, with Gowers, three stages of neuritis; the first stage can only be made out in the direct image. Still we must always keep in mind the physiological appearance where the borders of the pupil are so indistinct that we would make diagnosis of neuritis in the reversed image. That we should find more optic neuritis in cerebral tumors than in cerebellar ones, is the first time I ever heard it mentioned. I can not accept the statement just yet. We have not the right at present to call the symptoms of optic neuritis, three to six diopters, pathognomonic since it has been found in anemia, of which possibility some thirteen cases have now been reported.

Dr. **Bennett.**—I think many of the cases of spasm of the orbicularis are due to errors of balance of the vertical recti. One case I can recall, which was immediately and absolutely cured by a tenotomy of the right superior rectus, relieving four degrees of hyperphoria. This case has remained perfectly well for fifteen months without anything further being done. As to the question of brain tumor, I have often been astonished at the duration of life after diagnosis has been made. I can recall two cases. The first, a school girl, in which the diagnosis of brain tumor was made nine years before death, by Dr. Park Lewis, who found a papillitis on one side. The sight of the other eye remained good for six years, then began to fail. She then came to the dispensary, where I found an optic atrophy in the eye first affected, and a very marked optic neuritis in the other. She gradually became totally blind but lived for three years after. At the autopsy, the eye first affected was firmly adherent to a tumor surrounding the optic nerve and many other tumors were found in other portions of the brain. Dr. Earl Lothrop found the tumors to be sarcomatous.

The second case: Five or six years ago I examined a girl and found double optic neuritis, facial paralysis of the right side and uncertain gait. The exact details of the case escape me at the present moment. I made a diagnosis of brain tumor and gave a bad prognosis. The family wished further advice, so Dr. Crego was called in consultation. He confirmed my diagnosis and gave the patient but a few months to live. She is alive today, but is totally blind.

Dr. BURROWS.—Can Dr. Krauss throw some light on the obscure cases of double optic neuritis?

Two cases at the General Hospital had double optic neuritis, one with complete third nerve paralysis. Diagnosis: Locomotor ataxia; fundus showed double choked disk. We thought that there was also an affection of the posterior columns of the cord. The other case was one of double neuro-retinitis. The whole physical examination is negative except the symptoms of falling backward and vomiting without nausea. The case improved on mercury and iodide, though no specific taint could be made out. It was looked over by Drs. Cary, Stockton and Putnam. No definite diagnosis was established.

Dr. HINKEL.—Dr. Krauss's remarks concerning the possible latency of brain abscess, recalls to my mind an interesting though unfortunate case. About ten years ago I operated on a woman past middle life for the relief of nasal polypus. She had been a sufferer from asthma for many years, but otherwise claimed unusually good health and freedom from headache. Polyps had been removed from her nose a number of times, the last operation only a short time before, in another city. To obtain access to the diseased ethnoid cells, I removed the anterior part of the enlarged middle turbinated bone on the left side. After the operation the patient complained of left parietal headache. The second day after, I was called by her physician to see the case with him at her boarding house. Apparently her bed had not been occupied the previous day. She was mentally very dull and lethargic, though she recognised me. She lingered in that condition, with slight fluctuations of temperature for several weeks. At no time was there evidence of inflammation of the nose, though this was carefully looked for. Convulsions and stupor intervened, and Dr. Park trephined the frontal bone just above the left orbit. No pus was found in the basilar portion of the brain, but an abscess of considerable size was evacuated near the vertex. The patient died the next day and the post-mortem revealed a similar abscess in the right frontal lobe and small multiple abscesses throughout the brain. There was thrombosis of the left-middle meningeal artery. There was no evidence of meningeal inflammation above the cribriform plate, and I have always thought that she may have long had a latent brain abscess that unfortunately became acute and infectious after my operation. It is interesting in this connection to mention that intermittent or winking spasm of the eye is often reflex of adenoids, also choreic in character.

In closing Dr. **Krauss** said: Dr. Blaauw's hysterical ptosis may turn out after all to be ataxia. We must be very careful in our diagnosis between functional and organic disease. We ought to have a train of functional symptoms to back up the diagnosis with. That was the great point Charcot made.. Regarding the length of time a tumor may remain in the brain without causing death, it is impossible to say. I had a case in the Sisters' Hospital in 1892, which had all the symptoms of brain tumor, and we were ready to operate. The mother consulted other physicians who advised her to wait. The symptoms all disappeared and did not recur for five years. Suddenly the same symptoms reappeared and after the diagnosis had again been made, the symptoms in two months disappeared again. Diagnosis first made was abscess of occipital lobe. She has now few symptoms.

Fellows present, 14.

TYPHOID BACILLI FROM THE ROSEOLA.

E. **Fraenkel**, of Hamburg, (*Zeitsch. Hygiene u. Infectiose Krankheiten*, Bd. xxxiv., Heft. 3), obtained cultures of typhoid bacilli by excising the skin containing the roseola spots and placing them in bouillon. He believes the roseola represent inflammatory spots caused by typhoid bacilli which are hidden in the lymph spaces.—*Med. Age.*

Abstracts.

COUGHS: THEIR SUPPRESSION AND CURE.

Louis De Lorne, of New York, (*Interstate Medical Journal*,) says: The treatment of coughs in general has always been varied and unsatisfactory. With all of the numerous remedies of the materia medica, though each has had some particular value, there has always been the disadvantage of some unpleasant therapeutic effect following their use. Stomach disturbances, constipation, danger of habituation, and the like, are some of the complications experienced; especially are these conditions to be expected after the administration of codeine or morphine.

How especially important is it to have an efficient remedy for the cough of phthisis pulmonalis, which would not cause the disagreeable stagnation of secretory products of the lungs, that would not weaken the respiratory apparatus nor have any deleterious effect on the heart. Surely the profession has long felt the need of something to replace the various opiates for the suppression and cure of coughs, something that should be superior, more reliable and safer; a remedy that would not only be efficient, but safe for the treatment of the sympathetic cough of pregnancy; a remedy that can be used where heart complications occur; a remedy that will promptly check incessant, hacking cough, and paroxysmal coughs, which rob the patients of rest and sleep.

The complete clinical reports of Prof. Morris Manges, of the Mt. Sinai Hospital of New York, Dr. W. Freudenthal of New York, Dr. B. Turnauer (*Wiener Medizinische Presse*, No. 12, 1899,) Dr. A. E. Beketoff (*Klinische Therapeutische Wochenschrift*, No. 14, 1899,) following their investigation with heroin, I find to coincide with the results I have experienced with glyco-heroin (Smith), but I would here impress upon those interested that my entire investigations were made with glyco-heroin (Smith) only, excepting the few instances where I tried tablet triturates, and found them decidedly unsatisfactory.

Without doubt the merit of this preparation is to be attributed to its excellent composition, viz.: heroin, 1-16 grain; ammon. hypophosphite, 3 grains; hyoscyamus, 1 grain; white pine bark, 3 1-2 grains; balsam tolu, 1-4 grain, and glycerine sufficient to make 1 dram, wherein the therapeutic properties, if the drugs are properly compounded, and which is evidenced in this preparation, will be acknowledged desirable by every physician. Here I would point out the special advantage that this preparation possesses over heroin in any other form, viz.: the unnecessary administration of other remedies, while your patient is being treated with glyco-heroin (Smith), wherein you not only get the palliative effect of heroin, but have an admirable combination of remedies to bring about absolute cure in most cases. On account of the absence of syrup, instead of which glycerine, with its solvent and medicinal qualities, is used, there is not experienced the usual derangement of the stomach following the administration of preparations containing sugar or syrup. The addition of ammonia hypophosphite also appealed to me, for its superiority as an expectorant over other like remedies is an established fact and must add much to its therapeutic value. From the white pine bark contained therein the astringency of which is, no doubt, modified through the soothing effect of glycerine, I found a very beneficial effect on the mucous membranes, thereby proving this also a valuable and desirable addition.

The author then cited in detail a group of six cases in which he had administered glyco-heroin (Smith) for cough in various diseases and for various forms, giving intelligent and rational deductions therefrom, and closed his paper as follows:

And now, summing up all data of the clinical investigations carried on under my observation, I must say that we have here acquired a reliable, prompt and effective remedy with the following advantages: A reduction of temperature; prolonging respiration and at the same time increasing the volume of each respiration; almost devoid of hypnotic effect; absence of danger of acquiring the habit; it does not weaken the respiratory apparatus; does not cause unpleasant disturbances of the stomach or intestines; is without deleterious effect on the heart; the ratio of therapeutic to the toxic dose is many times smaller than that of morphine or codeine; it is of decided beneficial effect in all dyspnea; it does not constipate, or rarely, and then only slightly; it acts as a stimulant to the respiratory center, and stagnation of the secretions is excluded, and in comparative doses with codeine, the latter is shown to produce nausea and vertigo, while these symptoms are absent during the administration of glyco-heroin.

In conclusion, I would say that in all cases here cited, and many others as well, the instant relief obtained was a marvel both to myself and patients. I have never, with any remedy for similar indications, enjoyed the confidence I have in this preparation, and now have the pleasure in not only having offered relief and cure in the cases wherein this remedy was first suggested, but find glyco-heroin almost indispensable; and more especially so when I again consider codeine or morphine, with all their bad effects, as remedies compared with this preparation, which, on investigation, I found to be not only a true pharmaceutical product, but also an ethical product in every sense that the physician applies this term, in designating a medicinal preparation worthy of consideration by the medical profession.

THE TREATMENT OF SYPHILIS WITH REPORT OF SIXTY-FIVE CASES TREATED AT BELLEVUE HOSPITAL.

WINFIELD AYRES, New York, (*Philadelphia Med. Jour.*, November 10, 1900,) states that when his attention was called to mercurol as an antiseptic of special value in the treatment of gonorrhea, it occurred to him that it would be a first-class preparation for the treatment of syphilis. Some time was necessarily spent in determining the proper dosage. At first one-eighth of a grain was given three times daily, and this dose was gradually increased until it was found that three grains was the average quantity required to control the malady. The large amount given was seven grains and the smallest amount that exerted a controlling influence upon the disease was one-half grain. In starting a patient on a course of mercurol, the author advises beginning with half grain or grain doses. Salivation has been produced by two grains, and yet as much as six grains has been taken with no disagreeable symptoms.

The objections to the use of unguentum hydrargyri, as a remedy in secondary syphilis, are referred to and while the popularity of protoiodide of mercury is conceded, the irregularity of its action and its tendency to cause gastric and intestinal disturbances are not overlooked. In the writer's experience 33 per cent. of his cases were not benefited by this drug.

Mercurol is a nucleid of mercury, and was discovered by Karl Schwickerath, of Bonn, Germany. Kopp, Director of the Royal Polyclinic for Genito-urinary Diseases at the University of Munich, uses mercurol in smaller doses, which leads the writer to remark "he will find as I have done, that it is desirable to use a much larger dosage." Mercurol should not be given in solution with potassium iodide.

In all, 65 cases received mercurol at the Bellevue clinic, 60 of which had not had previous treatment. Of these, 13 did not return after the first or second visit; 14 did not remain long enough under treatment to give the preparation a fair trial, and 13 may be described as new patients. Deducting these 40 cases, there remain 25 cases that have been sufficiently long and regular in their attendance to supply data from which definite conclusions may be deducted. The detailed histories of these 25 cases are included in the paper. In summarising the author remarks that while two months' treatment of syphilis is insufficient to determine absolutely the value of any remedy, the marked improvement shown by many of his cases makes it certain that mercurol is of great value. Its superiority to mercuric chloride in controlling the symptoms of syphilis is proved. Like all internal remedies it has very little effect upon the initial lesion; still it has hastened the healing slightly. None of the cases required treatment with potassium iodide to control secondary manifestations.

To recapitulate: (1) mercurol causes less disturbance of the gastro-intestinal tract than any other preparation of mercury used internally; (2) it controls skin eruptions and pains much better than any other preparation, while it controls mucous eruptions as well as any other, and has equally as good an effect upon the chancre; (3) it is an advantage that it can be taken in pill form.

LOCAL ANESTHESIA IN HEMORRHOIDAL OPERATIONS AND ALL VARIETIES OF MINOR SURGICAL WORK.

GREEN, Chicago, (*Medical Times and Register,*) says his method of operating on hemorrhoidal tumors is as follows: First, the patient is instructed to take a cathartic the night before the operation, and an enema in the morning. With a saturated solution of boracic acid thoroughly cleanse the rectum, using a syringe or otherwise, and then immediately inject every tumor in sight with acestoria until each tumor is not sensitive to the prick of the needle. Sometimes it is best to use the bivalve speculum before, sometimes after, injection and sometimes not at all. It depends upon the condition and location of the piles.

With hemorrhoidal forceps, or Pean's artery forceps, pick up each tumor at its center, and turn it out. Use the clamp method when possible,—Kelsey's or Pratt's clamp. After turning the tumors slightly outward with the forceps which were left hanging to them, each by turn is clamped at its base. Then with a straight needle put in two or more stitches, as may be needed, back of clamp.

Remove the clamp and cut the tumor with straight scissors through the white line made by the middle blade of the clamp. There will be no hemorrhage if this line is followed. The stitches are now tied.

Then with hydrozone and hot water, one part of the former to five of the latter, syringe or spray the field of operation thoroughly.

The object of using hydrozone is two-fold: it is the safest and best germicide and hemostatic we have yet used. Not being a poison, and depending upon the oxygen it contains for its action, it is a safe remedy under all circumstances, both externally and internally. As a dressing we have several times used nothing, simply cleansing with hot water and hydrozone. An ideal dressing is ordinary sterilised gauze moistened with glycozone. Glycozone is anhydrous glycerine saturated with ozone, a powerful germicide and promoter of healthy granulation.

To prevent pain usually caused by the prick of the hypodermic needle, touch the point chosen for insertion with a glass pointed rod, dipped into 95 per cent. carbolic acid. To anesthetise the ear and stop earache, incline the patient's head to one side and drop into the ear about five drops of acestoria, or sufficient to fill the external meatus; also use acestoria hypodermatically in all cases where incisions or excisions are to be made, such as operations on ingrowing toe nails, removal of splinters from the flesh, opening boils, abscesses, carbuncles, and similar minor surgical procedures.

SUPRARENAL EXTRACT.

ANOTHER favorable report is made upon the action of the suprarenal extract in diseases of the respiratory tract. P. Floersheim, in a recent issue of the *Medical Record*, says he used it in rhinitis, acute tracheobronchitis, chronic bronchitis, congestion and edema of the lungs, hemoptysis and pulmonary tuberculosis. Its action in diseases of the upper tubes is more certain and the sensations of dryness, tightness and rawness are relieved, but acute bronchitis when treated from the onset was usually cured in twenty-four hours. The beneficial action obtained in congestion and edema of the lungs was undoubtedly due, not only to the constricting action upon the bloodvessels, but also to the stimulating effect upon the heart. Apparently good results were obtained in cases of hemoptyses, but it is, of course, speculative how much benefit was due to this drug. The powder is administered in three grain capsules, chewed without water and swallowed in a few minutes. When the doses are sufficiently large the action is apparent in from two to fifteen minutes. In some cases the action of the drug is permanent, but in the majority of cases it lasts only from ten minutes to an hour and must be frequently repeated.

Correspondence.

STEVENS: THE POSE OF THE BODY, THE TYPE OF THE CRANIUM AND THE VISUAL PLANE.

A CORRECTION.

Editor Buffalo Medical Journal:

Sir—I observe that by some inadvertence the text and the illustrations in the abstract of my address before the Buffalo Academy of Medicine, reported in the JOURNAL, March, 1901, are badly mixed. As matters stand the cuts are quite misleading and confusing. I do not know that it is worth while to try to remedy the matter now, but I will venture to suggest the order in which the figures should have been placed, with explanations of the types intended to be represented:

In place of "Fig. 4," read Fig. 5, the tall head.
In place of "Fig. 5," read Fig. 6, the broad head.
In place of "Fig. 6," read Fig. 4, the long head.

Of course the cuts will remain out of their order, but that cannot be helped. The explanatory legends would, however, serve to help.

Of course I shall be glad to leave the matter to your judgment whether it will be best to attempt any correction and the manner of doing so if you think it best.

GEORGE T. STEVENS.

NEW YORK, March 10, 1901.

[The Editor regrets the error referred to by Dr. Stevens and is glad to present an authorised correction thereof, by publishing the distinguished author's letter.]

FOR CHRONIC BRONCHITIS.

BUTLER (*Medical Standard*) says that in a majority of cases balsam, turpentine and tar derivatives are the most efficient expectorants, being especially indicated in relaxed conditions of the mucous membranes, with excessive secretion, in combination as follows:

℞	Oil of turpentine	1.33	mxx.
	Liquid tar	1.33	mxx.
	Oil of eucalyptus	3.33	ml.
	Balsam of tolu	6.00	ʒiss.
	Benzosal	16.00	ʒiv.

Mix. Dispense in sixty (60) capsules. Dose—One capsule four or five times a day.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges should be addressed to the editor: 284 Franklin Street, Buffalo, N. Y.

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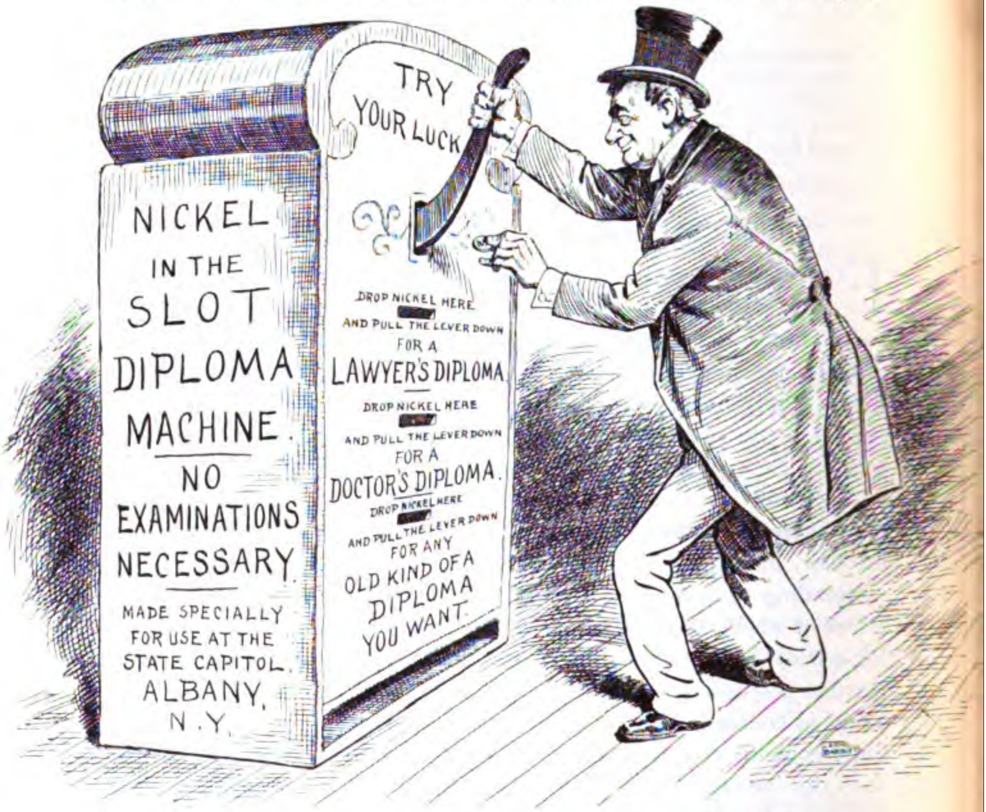
MEDICAL LEGISLATION AT ALBANY.

FOR the past two months the opponents of healthy standards, as related to medical education and kindred topics bearing on the public health, have been holding high carnival in the state legislature. Almost every winter witnesses a crop of bills prejudicial to professional improvement, but the past winter seems to have broken the record in the number of measures that have been introduced which menace the high standard heretofore set up by the state.

Generally speaking, such bills heretofore have been aimed at a modification of the medical practice laws in some one particular or another, but this year the lawyers and the pharmacists have been contending against pernicious bills that have been introduced and the effect of which, if passed, would be to weaken the barriers which have been wisely erected to guard the entrance to those useful and learned professions. Physicians, however, have had more than their share to contend with on these lines, as is usually the case. The chief contention of the latter has been against the Christian scientists and the osteopathists. These two sects are always able to rally a great number of people at any legislative hearing in which they are interested, chiefly because their followings are largely made up of women, who not only have plenty of time to devote to such gatherings, but who also have a penchant for the dramatic, which always develops in a greater or less degree on those occasions.

On the other hand physicans, whose time is taken up in serving the sick, generally find it difficult to leave home on a sudden call of this kind, hence are sparingly represented in numbers before committees that grant public hearings. The feeling has undoubtedly been intensified during the present legislative session, owing to the pernicious character of some of the bills that have been introduced. Indeed, it has been given out from Albany, we know not upon what authority, that the legislature, or some of the members thereof, has grown tired of the doctors (?) Small wonder, when we consider the fact that members of the legislature still can be found who will lend themselves to the introduction of measures that are calculated not only to irritate the profession of medicine, but to exasperate the friends of medical education and of public health safeguards throughout the state.


TRY YOUR LUCK
NICKEL IN THE SLOT DIPLOMA MACHINE.
NO EXAMINATIONS NECESSARY
MADE SPECIALLY FOR USE AT THE STATE CAPITOL. ALBANY, N.Y.
DROP NICKEL HERE AND PULL THE LEVER DOWN FOR A LAWYER'S DIPLOMA
DROP NICKEL HERE AND PULL THE LEVER DOWN FOR A DOCTOR'S DIPLOMA.
DROP NICKEL HERE AND PULL THE LEVER DOWN FOR ANY OLD KIND OF A DIPLOMA YOU WANT.

ONLY PERSONS WITH A "PULL" ALLOWED TO USE THIS MACHINE.

[From the *New York Tribune*, March 20, 1901.]

We have more than once, not only in the columns of this journal, but on public occasions and in private conversation, urged the propriety of the legislature declining to consider bills relating to these matters unless they emanate from responsible bodies, representative in character, like the regents of the university or the state medical societies. For ten years and more the Medical Society of the State of New York appeared annually at the bar of the legislature, praying for advanced standards in medical education. The Homeopathic and Eclectic state medical societies finally joined in this crusade, which ultimately resulted in persuading the legislature to give us one of the best practice acts that any state has yet evolved.

Briefly summarised, it has established preliminaries equal to a high school diploma; it requires four years' training in a medical college before the degree of doctor of medicine can be conferred; and, finally, it requires a separate examination by the state, the details of which are duly prescribed by law, before license to practise can be obtained.

Scarcely had this new order of things been established in 1891, when attempts were begun to weaken or invalidate some one or all of the beneficent provisions just referred to; and for ten years past it has required the constant vigilance of the constituted medical authorities of the state to prevent or avert such direful disaster. Strangely enough, these attempts are made possible by the action of members of the legislature who introduce measures, received from irresponsible persons who have some personal interest to further, having little or no regard for the general good; but, on the other hand, who apparently nurse an especial hatred toward the medical practice act.

It would seem to be pretty nearly time, therefore, that a busy legislature like ours should rid itself of all such unnecessary and unwholesome measures, by referring them back to the representative medical societies or to the regents' office for opinion before taking definite action. We sympathise with our friends the lawyers and the pharmacists in the similar troubles they are experiencing, and would suggest a similar method of relief. When a plan of dealing with these measures, like the one suggested, can be adopted, then, and only then, will medical education in the Empire State be placed upon an enduring basis. It would not embarrass but rather relieve the individual member who is besought to introduce these measures. He could present them by request when he desired to do so; they could then, as now, be referred to the appropriate committees, and the chairmen of these could refer them to the regents or to medical, legal, or pharmaceutical societies, as the case might be, for an opinion as to their merits.

In this way the interested societies would get official notice of the measures, and unnecessary trips to Albany would be prevented. The present method of dealing with these questions is a scandal to the intelligence of the period, and a blotch on the escutcheon of parliamentary procedure.

THE PROPOSED NEW YORK STATE NURSES' ASSOCIATION.

THE progressive spirit so active in the medical profession has incited the allied professions to almost equal activity regarding the fitness and qualification of its members, so that in New York State at the present time the Regents of the University decree who shall practice medicine, pharmacy, dentistry and veterinary science. That the regents, through the various state examining boards, have done their work honestly and courageously, no one will controvert, and that the allied professions stand on a higher plane than ever before no one will dare gainsay.

Allied to the medical profession, dependent and interdependent, stands the nursing profession, composed at the present time of a heterogeneous body of women, some well qualified, others poorly, and some possessing no qualifications except a diploma and uniform. Just as the medical profession recognised their once chaotic condition, so do the progressive nurses recognise theirs, and a movement is on foot to organise a New York State Nurses' Association. Such an organisation is intended to admit any nurse holding a diploma from a recognised reputable school, connected with a hospital, to active membership. Once organised and well established, and as Miss Sylveen Nye so aptly says, "having learned and proven that we know exactly what we want, then we may ask the legislature to pass a measure incorporating the following features: Uniform entrance examinations; uniform curriculum; uniform final examinations conducted by the regents, and that no hospital be allowed to maintain a training school unless it provides, either by its own or through combination with another, suitable clinical material."

The movement has started in the right way and needs the coöperation of every honest, intelligent nurse, who desires improvement in her chosen profession and security for herself. Before legislation can be demanded organisation and unity must be perfected, and then, with the approval and assistance of the medical profession, a nurses' licensing act can be passed and placed upon the statute book. Such a law would accomplish what has been so sadly needed: uniform qualification, uniform standard of training, the legislation of the title of "trained nurse," and what is most important, the best possible nursing for all classes.

The JOURNAL hopes to see such an organisation effected and congratulates the Buffalo nurses on taking the initiative in such a meritorious undertaking.

THE condition of the streets in Buffalo during the past few weeks has been far and away the worst in many years. Since smooth pavements have become the rule, the good care taken of them and the resulting cleanliness have been our pride and boast. Every visitor has complimented us in this respect and departed with a jealousy almost envious in character. The accumulation of snow and ice and the filth thus invited has recently placed us, more's the pity, in anything but an enviable attitude. Dr. Ernest Wende, the health commissioner, however, has solved the problem and the board of public works, rather than be indicted as a nuisance at the bar of public opinion, finally cleaned up the principal streets.

THE anti-spitting ordinance, after going through its various stages of struggle in committees and before both houses of the city legislature, where hearings were held, finally became a law. This is another triumph for the health department, which was seconded by physicians and women in large numbers,—all of whom are in favor not only of the prevention of disease, but of a wholesome cleanliness that should always prevail in every enlightened community.

THE ventilation of school buildings is one of the important questions that engages the attention of sanitarians and public health officers at the present time. In Buffalo it is a very live question, in view of the fact that the ventilation in school houses here is notoriously defective and sadly falls short of meeting the requirements of scientific modern sanitation. The school board, under the leadership of Dr. P. W. Van Peyma, chairman, is investigating the subject with a view to improvement, and the work of the board in this direction is ably seconded by Dr. Henry R. Hopkins, chairman of the committee on hygiene of the Medical Society of the State of New York. It is to be hoped that the efforts of these gentlemen will result in correcting an evil that is far reaching on the future health and lives of children of school age.

The *New York Tribune* is always upon the side of right when the subject of professional standards is up for discussion. It does not favor lowering them in any respect, but if any change is desirable it advocates their advancement. It has recently presented strong arguments in its editorial columns against favorable action on certain bills before the present legislature, which the members would do well to heed. Still more recently, it has published an excellent cartoon, drawn by Mr. Leon Barritt, that is more forceful than any written argument against such harmful legislation. Through the courtesy of the *Tribune* we are enabled to republish this telling picture elsewhere in this magazine.

PERSONAL.

Dr. Eugene A. Smith, adjunct professor of clinical surgery at the University of Buffalo, spoke on the subject "Ideals of medicine," at the Lawyers' Club dinner, held at The Genesee, March 7, 1901. In the course of a very clever speech he said that there were two great ideals, the prevention of disease and the curing of disease. He spoke of personal hygiene in which purity of personal life, observance of a moral standard, plays so important a part. Municipal hygiene, with sanitation, also was discussed He told of what scientific medicine has done, instancing the conquering of diphtheria. He cited the great advances in medicine and surgery, of the good fortunes of the poor with hospitals affording them better treatment than the rich had fifty years ago. He traced disease by heredity, environment and habits, touched on the failures in medicine, referred to christian science, magnetic healing and osteopathy, then spoke of quackery and finally of ethics.

Dr. Daniel Lewis, of New York, was recently appointed by the Governor to be State Health Commissioner and he was promptly confirmed by the senate. Dr. Lewis was president of the State Board of Health which has been legislated out of office, for three terms, and he has served as a member of the board since. His appointment as State Health Commissioner is for the term ending on December 31, 1904. The salary of the office is $3,500 a year. He will have entire jurisdiction over the matters which have heretofore been supervised by the State Board of Health.

Dr. Nelson W. Wilson, of Buffalo, has been appointed sanitary officer of the Pan-American exposition. The appointment emanates from Dr. Roswell Park, as medical director of the exposition, and is a fitting recognition of Dr. Wilson's ability in the direction named.

Maj. Charles K. Winne, Surgeon, U.S. Army, now at Fort Porter, was recently directed to report in person to the surgeon-general of the army, in order to consult in regard to the exhibit of the medical department of the army to be made at the Pan-American exposition.

Dr. Matthew D. Mann, of Buffalo, recently addressed the students of the Masten Park High School, taking for his subject, The medical profession. The address was in the nature of advice to students who are thinking of entering the profession of medicine.

Dr. Charles W. Farr, formerly of Buffalo, has been appointed assistant surgeon in the United States army, with the rank of first lieutenant. Dr. Farr has lately returned from the Philippines, where he has been serving as contract surgeon.

Dr. J. Glen Ernest has removed from Buffalo to Gasport, Niagara County, N.Y. Dr. Ernest is one of the rising younger members of the profession of medicine, and will prove an undoubted gain to the people in his new environment.

Dr. W. J. O'Donnell, of Buffalo, announces the removal of his office from 399 Front Ave., to 269 Carolina Street, cor. West Avenue and Tracy Street, March 1, 1901. Hours, 9 to 10 a.m.; 1 to 3 and 7 p.m.

Dr. James P. G. Gould, of Buffalo, U. of B. '99, is now pursuing post-graduate studies in New York, but expects to return about May 1, 1901. He will then establish himself on Franklin street.

Dr. Ernest Wende, health commissioner of Buffalo, read a paper by invitation before the Chicago Medical Association, Wednesday evening, March 6, 1901, on The miscarriage of municipal sanitation.

Dr. **B. A. Gipple**, of Alden, N.Y., was elected a member of the board of supervisors of Erie County last month. Dr. Gipple, we believe is the only physician who will sit in the new board.

Dr. Edgar A. Forsyth, of Buffalo, has removed from 348 Franklin Street, to 326 Franklin Street. His practice is limited to diseases of the nose, throat and ear. Hours: 9 to 1 and 7 to 8.

Dr. Edmond E. Blaauw, of Buffalo, N.Y., has been appointed editor of Dutch ophthalmic literature in the *Annals of Ophthalmology*, in the place of Dr. Wendell Reber, resigned.

Dr. Vertner Kenerson, of Buffalo, has been appointed assistant medical director of the Pan-American Exposition and will have immediate charge of the ambulance service.

Dr. Eugene Wasdin of the Marine Hospital Service, delivered two lectures on Yellow fever in Alumni Hall, at the University of Buffalo, March 11 and 18, 1901, from 5 to 6 p.m.

Dr. Helene Kuhlmann, assistant physician at the Buffalo State Hospital, has gone to Johns Hopkins University, where she will spend six weeks in study.

Dr. Nelson G. Russell, of Buffalo, has been appointed assistant surgeon 65th Regiment, N. Y. N. G., vice Captain Harry Mead, M. D., resigned.

Dr. Ira C. Brown, of Buffalo, has been appointed a surgeon of volunteers, with the rank of major. Dr. Brown is still serving in the Philippines.

Dr. James E. King, of Buffalo, U. of B. '96, recently sailed for Europe, where he will spend six months in professional study, chiefly of obstetrics and gynecology.

Dr. Arthur G. Bennett, of Buffalo, announces his removal from 191 Delaware Avenue to 26 Allen Street. Hours: 9 to 1.

Dr. J. Henry Dowd, of Buffalo, will remove May 1, 1901, from 288 Franklin Street to the Cutler, 380 Franklin Street.

OBITUARY NOTES.

Dr. Richard J. Dunglison, of Philadelphia, died at his home March 4, 1901, aged 66 years. Dr. Dunglison was the son of Dr. Robley Dunglison, the editor of Dunglison's Dictionary,and of which he, himself, was editor during many editions. He was also editor of Dunglison's College and Clinical Record, and served as treasurer for the American Medical Association for several years.

Dr. Alonzo T. Smith, of Syracuse, died March 8, 1901, aged 81 years. He had been a prominent physician in that city and was regarded as the oldest alumnus of Geneva Medical College.

Dr. James Chapman, of Medina, died in that village February 27, 1901, aged 77 years. Dr. Chapman was a native of Orleans county, graduated at New York University in 1852, served throughout the civil war as a medical officer and then located at Medina, where he has practised his profession until his late illness.

Dr. J. Stone Armstrong, of Buffalo, died at his home March 3, 1901, aged 61 years. He graduated at Jefferson Medical College in 1879, and had been a resident of Buffalo for about twenty years. His body was incinerated at his request in the Delavan Avenue Crematory.

Dr. William D. Haggard, of Nashville, Tenn., died at Columbia in that state January 25, 1901, from the effects of an attack of paralysis which occurred on the previous day, aged 74 years. Dr. Haggard was one of the best known physicians in the South, and was a teacher and surgeon of great ability. He leaves a son, Dr. William D. Haggard, Jr., who is rapidly attaining a similar professional eminence.

John W. Clippinger, a student in the Freshman class of the medical department of the University of Buffalo, died at Buffalo General Hospital, Thursday, March 21, 1901, from endocarditis. Funeral services were held next day, attended by the faculty and students, after which the remains were sent to Pipestone, Mich., the home of the deceased.

SOCIETY MEETINGS.

The Central New York Homeopathic Medical Society held its fiftieth annual meeting at Syracuse, Thursday, March 21, 1901. The officers are: Volney A. Hoard, of Rochester, president; Josephine Howland, of Auburn, vice-president; S. L. Guild-Leggett, of Syracuse, secretary and treasurer. Dr. E. P. Hussey, of this city, was the toastmaster at the banquet held in the evening.

THE Buffalo Academy of Medicine held meetings during the month of March, 1901, as follows:

Quarterly Meeting.—Tuesday evening, March 19th. The Section on Pathology provided the following program: A report of recent investigations of cancer, H. R. Gaylord. A case of organic epilepsy; clinical and pathological report, Henry P. Frost.

Section on Ophthalmology, Otology, Rhinology and Laryngology.—Monday evening, March 18th. Program: The making and fitting of spectacles and eye-glasses from the optician's standpoint, Mr. P. H. Meyer. Fractures of the nose, Marshall Clinton. Report of a case of emergency tracheotomy, George F. Cott.

Section on Medicine.—Tuesday evening, March 12th. Program: The racial factor in hysteria, Julius Ullman. Hysterial aphonia, George F. Cott. Discussion by William C. Krauss. The *x*-ray in general practice, with stereopticon views, A. W. Bayliss.

Section on Surgery.—Tuesday evening, March 5th. Program: Surgical mixed pickles, Marcel Hartwig. Transplantation of tendons, J. Hilton Waterman.

AN International Congress of Nurses will be held in Buffalo, September, 1901, during the time of the Pan-American exposition, to cement and strengthen the national and international organisations which the nurses of this country, Great Britain, the English Colonies, Denmark and Holland have for the last few years been intent upon developing. The nurses of the English speaking countries also have in view the attainment of state examination and registration.

The national association of the United States has now become affiliated with the National Council of Women, as the others purpose doing in their respective countries.

The president of the International Council of Nurses is Mrs. Bedford Fenwick, of London, and the vice-presidents are the presidents of the respective national councils. The executive officers of the Buffalo congress are the officers of the American Society of superintendents of training schools for nurses, those of the National Alumnæ of schools for nurses, of the Buffalo Nurses' Association, and the American councillors of the international council of nurses.

The chairman of the congress is Miss McIsaac, superintendent of nurses in the Illinois Training School, Chicago, and the secretary is Miss Banfield, superintendent of the Polyclinic Hospital, Philadelphia.

THE Association of Medical Officers of the Army and Navy of the Confederacy will convene in Memphis, Tenn., May 28-30, 1901, during the meeting of the Confederate Reunion. All surgeons, assistant surgeons, acting assistant surgeons, or contract physicians and hospital stewards, in the Army and Navy of the Confederate States, and all regular physicians who served honorably in any capacity in the Confederate States Army and Navy, and all regular physicians who are sons of confederate veterans, are eligible to membership.

COLLEGE AND HOSPITAL NOTES.

EMERGENCY HOSPITAL AT THE PAN-AMERICAN EXPOSITION.

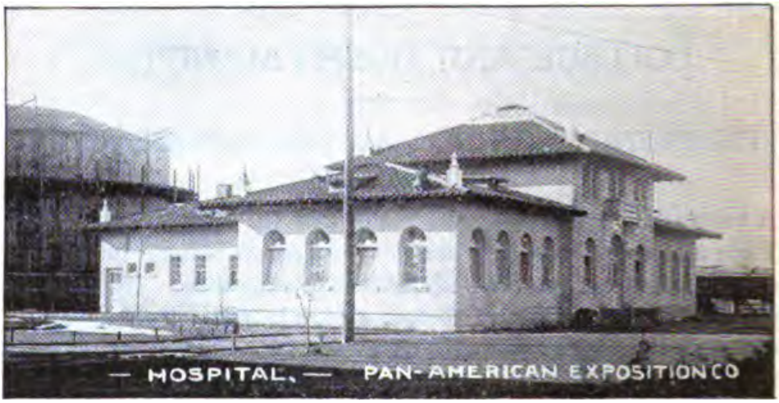
A VERY pretty hospital building stands near the west end of the mall. Floor area rather than elevation is a prominent feature in the construction of this important adjunct to the exposition. Utility is the prime consideration in this design, though it is by no means a case of utility unadorned. In conformity with the general exposition plan the free Spanish renaissance has been treated, in this instance, with a strong leaning toward the old mission interpretation.

Having a frontage of 90 feet on the mall, the main wing has a depth of 38 feet with a height of but one story, except in the center, where it assumes the form of a square tower with a rounded top. This tower attains to the pretentious height of two stories, surmounted with two flagstaffs. One staff supports the exposition flag and the other waves the well known Red Cross banner, the only universal international emblem that is recognised and respected in all countries.

A rear wing, one story high, runs back from the center portion a distance of 56 feet, with a width of 32 feet. This form of construction lends itself readily to this picturesque reminder of the early struggles of our first missionaries.

Color, here as everywhere throughout the grounds, adds its touch of beauty to the odd and in many cases obsolete methods of construction, penetrating rather than clothing the building in the warm changing tints of the sunset. A low wandering adobe mission house, covered with heavy red tiling, its weather stains retouched by the gorgeous rays of the departing sun, may be readily imagined while looking at this rehabilitation of the past.

Any antiquated illusion that may be conveyed by the outside appearance of this building is, however, at once dispelled by a visit to the interior. Modern arrangements that are both convenient and sanitary, mark every feature. Approved medical and surgical appliances have been carefully selected, in regard especially for their adaptability to emergency work and the exigencies that are likely to arise. The main hospital entrance is from the mall, opening directly into a handsome rotunda decorated with tropical plants and suitable hangings of pictures, drapery, and the like.



EMERGENCY HOSPITAL AT THE PAN-AMERICAN EXPOSITION.

The main office is situated at the farther left hand corner of this rotunda, where it is carefully tucked away under the staircase, forming an irregular alcove. It contains telephone and electrical annunciator, messenger call service, together with other modern and necessary appurtenances. As this is lighted from above and encircled by a round gallery opening through the upper story, the effect is very pleasant and agreeable. The first floor front contains in the extreme western wing, two male wards with seven cots each, a bath room, physicians' office, a morgue and a linen chest. The eastern wing contains a woman's ward, large enough to hold a dozen cots, with direct communication to the woman's bath room. This wing also contains an office for the superintendent of nurses, private physician's office, a linen closet and other conveniences.

The upper story is intended for the use of the resident physician and the necessary attendants. It is fitted up with four pleasant, comfortable bed rooms and a bath room. The rear wing, extending back from the main entrance, contains the operating room, sterilising department and instrument cases. Immediately across the hall is the emergency bath room and patients' waiting room. Still farther down the corridor is located the kitchen, pantry and dining room, which is intended for the use of patients only, as the staff have their culinary department in the service building, situated but a few yards distant. In the extreme southern end of this ring is the storage room for the electrical ambulances; this room also contains a station for recharging the batteries, electricity for this purpose being brought from an electric circuit provided for the electric launches on the grand canal. In addition to the two electrical ambulances, a steam or gasoline motor ambulance will be provided to be ready in case of a possible failure of the electrical current. The building is provided with natural gas for heating purposes and for cooking when necessary for the patients.

Water, gas and electricity is carried to every part of the hospital in the most approved manner. The building is plastered throughout and rendered sanitary and germ proof so far as possible, in every portion. The staff in attendance is uniformed as to grade according to universal custom.

In the matter of equipment and appliances, everything is of the newest and best. A new litter attracts considerable attention; it is carefully balanced and so arranged that one attendant can operate it easily and noiselessly as it runs on two wheels about 20 inches in diameter, which are fitted with large inflated rubber tires. Sterilising apparatus with an apartment for instruments and another for towels and linen, is another necessary arrangement.

Dr. Roswell Park is the medical director, Dr. Vertner Kenerson is deputy medical director, and Dr. Alexander Allen is the resident physician,—a staff which will at once indicate medical and surgical skill in the care of patients in this hospital. The efficiency aimed at in this department is an illustration of the manner in which the exposition affairs are administered in all its departments. Everything has been carefully arranged according to a great comprehensive plan, the details of which have been worked out in every instance with careful conscientious precision.

In regard to the importance of this adjunct to the exposition it may be said that up to the 1st of March, 504 cases have been treated on the grounds, only one of which proved fatal. These include all forms of sickness and accidents to workmen employed upon the construction work. In this relation it is well to note that the number of cases treated at the Omaha exposition was about 3,000, while the history of the hospital at the World's Fair in Chicago gives a total of 11,602 medical and surgical cases treated, resulting in 69 deaths.

It is hoped to have less use than this for the hospital at the Pan-American, though in the immense crowds who will attend, no doubt, many individuals will have occasion to appreciate the provision that has been made in this direction.

THE German Hospital, located on Jefferson Street, near Genesee, Buffalo, N.Y., was opened for patients March 11, 1901. It is one of the finest hospitals in the country, whether considered from the viewpoint of construction, equipment, or hygienic arrangement. It has accommodations for about 72 patients, and both wards and private rooms are models of perfection.

The medical and surgical staff is as follows: President, Charles H. W. Auel; vice-president, Marcel Hartwig; secretary, Charles Weil. Internal medicine—consulting physicians—Conrad Diehl, Emil S. Tobie, Thomas Lothrop; attending physicians, H. C. Buswell, William Meisberger, Julius Ullman, Robert Hebenstreit; surgery—consulting surgeon, Roswell Park; attending surgeons, M. Hartwig, Herman Mynter, J. G. Meidenbauer, Henry G. Bentz; gynecology—consulting physician, Matthew D. Mann; attending physicians, Charles H. W. Auel, Max Breuer, Herman E. Hayd, Sigmund Goldberg; obstetrics—consulting physician, Charles H. W. Auel; diseases of children, L. Schroeter, Charles Weill, H. C. Rooth; eye and ear—consulting physicians, Lucien Howe, Julius Pohlman; attending physician, Jacob Goldberg; nose and throat, attending physicians, G. F. Cott, W. S. Renner; skin—consulting physician, Ernest Wende; attending physicians, Grover Wende, J. Kraus, Alfred E. Diehl; genito-urinary, Alois Jokl, Julian A. Riester; nervous diseases—consulting and attending physicians, W. C. Krauss, Floyd S. Crego, H. G. Matzinger; pathology, W. G. Bissell, H. R. Gaylord, J. A. Miller.

THE new Consumption Hospital, an adjunct to the Erie County Hospital, now building on the site of the one destroyed by fire about a year ago, is well under way. Ground was broken in February, and the foundation is about completed. The structure will cost about $50,000.

THE Mercy Hospital, of Pittsburg, Pa., has established a department for the treatment of patients bitten by rabid animals. The treatment given is by inoculation, according to the method devised by Pasteur for the prevention of hydrophobia. It is in charge of Dr. A. Letévé, who has had ten years' experience in this work in the Pasteur Institutes in Lille, France, and in New York City. The fee for treatment is one hundred and fifty dollars in advance, including board and lodging.

For additional information, address Pasteur Department, Magee Pathological Institute, Mercy Hospital, Pittsburg Pa.

THE regents of the University of the State of New York, at a meeting held March 14, 1901, appointed Drs. Joseph P. Creveling, of Auburn, and Eugene Beach, of Gloversville, as medical examiners representing the Medical Society of the State of New York, to succeed themselves. Drs. Willard N. Bell, of Ogdensburg, and John B. Garrison, of New York, were appointed medical examiners representing the Homeopathic Medical Society of the State of New York. Dr. William Gilman Thompson, of Cornell Medical School, and Dr. Willis G. Tucker, of Albany Medical School, were appointed members of the medical council for five years and three years respectively, in place of Drs. Mann and Didama, who retire.

THE Fitch Hospital was closed February 28, 1901. This hospital has been managed by the Buffalo charity organisation society as an accident hospital for several years.

THE Manhattan Maternity Hospital and Dispensary, a gift to the poor of the east side of the city of New York by a man who has long been interested in the betterment of conditions in that locality, was incorporated at Albany, March 18, 1901. The incorporators are: Daniel S. Lamont, Cornelius Vanderbilt, Frank L Polk, Henry S. Thompson and William Thorne, of New York City; Moses Taylor, of Mount Kisco, and Percy R. Pyne, of Bernardsville, N.J.

THE Batavia Hospital, of which mention has been made heretofore in these columns, appears to have reached a stage of certainty as to its construction. A site has been purchased and plans have been drawn looking to the erection of a two-story building, 61 feet wide and 53 feet deep, at an estimated cost of $6,000. This will leave from the amount raised a goodly sum for equipment. The work thus far accomplished has been done entirely by women.

THE New York Skin and Cancer Hospital has announced the following course of clinical lectures on syphilis, by members of the visiting and consulting staffs, on Wednesday at 4.15 p.m : March 6, Syphilis as a disease; modes of infection; extra-genital syphilis, L. Duncan Bulkley; March 13, Skin manifestations of syphilis, L. Duncan Bulkley; March 20, Infantile syphilis, A. Jacobi; March 27, Syphilis of the mouth, nose, throat and larynx, D. Bryson Delavan; April 3, Syphilis of the eye and ear, David Webster; April 10, Syphilis of the nervous system, Edward D. Fisher; April 17, Syphilis of internal organs, Edward G. Janeway; April 24, Syphilis of the bones, and surgical relations of syphilis, Willy Meyer; May 1, Synopsis, conclusions and treatment of syphilis, L. Duncan Bulkley. The course is free to members of the medical profession on presentation of their professional cards.

Book Reviews.

A SYSTEM OF PRACTICAL THERAPEUTICS. By Eminent American and Foreign Authorities. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics, Jefferson Medical College; Physician to Jefferson College Hospital, etc., Philadelphia. New (2d) edition, thoroughly revised. In three 8vo volumes, containing 2593 pages, with 427 engravings and 26 full-page colored plates. Philadelphia and New York: Lea Brothers & Co. 1901. [Price per volume, cloth, $5.00 net; leather, $6.00, net; half morocco, $7.00, net.]

The first and second volumes of this important system are already issued, and the third is to follow at a short interval of time. This second edition makes the work comparatively a new treatise, because nearly one-half of the articles are entirely new, while the others have been very largely rewritten. Moreover, the revision has been so carefully done that scarcely a paragraph fails to mark the handiwork of the reviser's pen. The following summary of Volume I. will prove interesting:

General therapeutic considerations, by Horatio C. Wood; Prescription-writing and the combination of drugs, by Joseph P. Remington; General sanitation, by Henry B. Baker; Nutrition and foods, including the treatment of obesity and leanness, by I. Burney Yeo; General exercise, by Edward Mussey Hartwell; The rest-cure for neurasthenia and hysteria, by John K. Mitchell; Electro-therapeutics, by A. D. Rockwell; Hydrotherapy, by Simon Baruch; Climate, by S. Edwin Solly; Mineral waters and their medicinal uses, by James K. Crook (new); Massage and swedish movements, by Robert E. Moore (new); Disinfection, by W. M. L. Coplin (new); Diseases of the thyroid and thymus glands, including myxedema, cretinism, Graves's disease, and obesity, by S. J. Meltzer; Chronic articular rheumatism, rheumatoid arthritis and gout, by James Stewart (new); Treatment of diabetes mellitus, by James Tyson (new); Diseases of the blood, by Ralph Stockman (new); The present treatment of syphilis, by Edward Martin; The treatment of tuberculosis, by Lawrence F. Flick (new); Scrofulosis, by Walter Chrystie; Scurvy, or scorbutus, by Charles Edward Banks (new).

It will be observed that each author has been carefully chosen, and special fitness for the subject written upon has been the paramount object in view.

The second volume presents authors and subjects as follows:

Typhoid fever, by H. A. Hare (new); Malarial fevers, by James M. Anders; Smallpox, by William M. Welsh; Varicella, rubeola, rubella and scarlatina, by J. P. Crozer Griffith (new); Yellow fever, by D. T. Laine (new); Dengue, by W. J. McLaughlin (new); Acute tonsillitis and influenza, acute articular rheumatism, by Frederick A. Packard (new); Diphtheria, by Floyd M. Crandall (new); Spasmodic croup and rickets, by Floyd M. Crandall (new); Diseases of the mucous membrane of the mouth, and mumps, by Floyd M. Crandall (new); Pneumonia, croupous and catarrhal, by H. A. Hare (new); Asthma, bronchitis and whooping cough, by Norman Bridge; Acute and chronic organic diseases of the heart, by W. H. Thomson; Diseases of the bloodvessels, by Frederick C. Shattuck; Nervous diseases of the heart, by Sir Lauder Brunton; Diseases of the stomach, by Thomas G. Ashton; Diseases of the liver, gall-bladder, hepatic duct and spleen, by John H. Musser (new); Diarrheal diseases and dysentery, by W. W. Johnston; The intestinal parasites, by H. A. Hare; Diseases of the kidneys, by N. S. Davis, Jr.; Headaches and neuralgia, by Wharton Sinkler; The drug habits, by F. X. Dercum; The disorders of sleep, by Hugh T. Patrick; Locomotor ataxia, acute infantile spinal paralysis, myelitis, and amyotrophic lateral sclerosis, by M. Allen Starr; Apoplexy, brain tumor, spinal tumor, meningitis, cerebritis, and neuritis, by Charles K. Mills; Spasmodic affections of the nervous system, by Joseph Collins; The medical treatment of insanity, by H. M. Bannister; Hospital insanity, by Edward N. Brush; The modern treatment of diseases of the skin, by Edward W. Stelwagon.

With such an array of talent, general and special, it is little wonder that the system should obtain a completeness rarely equaled, and that it should be authoritative in its teachings, accepted as such and so recommended by editors and instructors. It is, moreover, a work of almost indispensable necessity to the general practitioner of medicine, giving the latest information needed at the bedside in everyday practice.

THE CARE OF THE CONSUMPTIVE. A consideration of the scientific use of natural therapeutic agencies in the prevention and cure of consumption; together with a chapter on Colorado as a Resort for Invalids. By CHARLES FOX GARDINER, M. D., Member of the American Climatological Association. Duodecimo, pp. 182. New York and London: G. P. Putnam's Sons. 1900.

The purpose of this book, according to the author's statement, is to give practical rules for the consumptive regarding the use of fresh air, sunlight, food, rest and exercise; in other words, to instruct those afflicted with consumption how to apply nature's remedies to the best advantage.

In the course of eleven chapters the author treats of these subjects in a most intelligent and simple way. In these days when the state is interesting itself in the care of incipient consumptives in sanitoria specially located and chosen for that purpose, such a book as this cannot fail to be advantageous, by disseminating among the laity an intelligent understanding of the subjects under consideration. For instance, the chapter on living out of doors should be carefully studied, and especially to be commended is that portion of it relating to tent life. House hygiene is another chapter that appeals to the intelligent reader and, though short, it contains much common sense information. We commend the book most heartily to every person interested in the subject.

OBSTETRIC CLINIC. By DENSLOW LEWIS, Ph. C., M. D., Professor of Gynecology in the Chicago Polyclinic; President of the Attending Staff of Cook County Hospital, Chicago. A series of thirty-nine clinical lectures on practical obstetrics delivered to Students and Practioners in Cook County Hospital, Chicago. Octavo, pp. 640. Chicago: E. H. Colegrove, 65 Randolph Street. [Price, $3.00.]

It is difficult to understand why this book has been published, except from the viewpoint of an advertisement, for it certainly does not contribute anything new to the literature of medicine.

The publication in book form of stenographic reports of clinical lectures is of doubtful propriety in general, and it seems to us in these days of overproduction of medical literature this book in particular may be spared without dètriment.

One of the vagaries of the book is that the author's name appears at the head of each lecture, and we are as often reminded that each one is "stenographically reported by Bertha Barnet." Beginning with the nineteenth lecture the author adds "professor" to his name and title and so continues to the end. The book is printed on a poor quality of paper, but an attempt has been made to bind it rather handsomely, if not substantially.

AN AMERICAN TEXT-BOOK OF PHYSIOLOGY. Edited by WILLIAM H. HOWELL, Ph. D., M. D., Professor of Physiology in the Johns Hopkins University. Second edition, revised. Vol. II. Philadelphia and London: W. B. Saunders & Co. 1901. [Price, cloth, $6.00 net; sheep or half morocco, $7.00, net.]

The contributors to Volume II. of the American Text-book of Physiology are Professors Bowditch, of Harvard; Donaldson, of Chicago; Lee, of Columbia; Lombard, of Michigan, and Sewell, of Denver. The same careful revision that marked the first volume is evident here. The section devoted to the nervous system has been entirely rewritten and is the most interesting, as it is the most important in the book. The other sections take up the general physiology of muscle and nerve, the special senses, special muscular mechanisms, and reproduction. Again the publishers are to be commended for their wisdom in replacing the single volume by two.

M. J. F.

STUDENTS' EDITION—A PRACTICAL TREATISE OF MATERIA MEDICA AND THERAPEUTICS, with Special Reference to the Clinical Application of Drugs. By JOHN V. SHOEMAKER, M. D., LL.D., Professor of Materia Medica, Pharmacology, Therapeutics and Clinical Medicine, and Clinical Professor of Diseases of the Skin in the Medico-Chirurgical College of Philadelphia; Physician to the Medico-Chirurgical Hospital. Fifth edition. Thoroughly revised. Pages vii.—770. Philadelphia: F. A. Davis Co. 1901. [Extra cloth, $4.00 net; sheep, $4.75 net.]

Experience in teaching develops the necessities of the class-room, the clinic and the laboratory. The author of this work has found from teaching a vast number of students, what they most need as a text-book in this department of medicine. This experience has led him to make a change in issuing the fifth edition of his well and favorably-known treatise. It now appears as two independent issues, —one for students, and the other for practitioners of medicine.

The first, known as the students' edition, is before us, and we cannot fail to commend the new departure in the highest terms. In the students' edition, the author has included only these drugs and preparations official in the pharmacopoeias of the United States and Great Britain. This is an excellent plan, as it is highly important not to confuse the student with too much material for him to assimilate. He should first become familiar with official remedies; this will absorb all the time he will find available during student life.

The author has taken pains to make his revision complete, so that it represents the immediate present in all the essentials of materia medica and therapeutics. It is one of the most practical text-books in this department of medicine.

A TEXT-BOOK OF PHARMACOLOGY AND THERAPEUTICS, OR THE ACTION OF DRUGS IN HEALTH AND DISEASE. For the use of Students and Practitioners of Medicine. By ARTHUR R. CUSHNY, M. A., M. D., Aberd, Professor of Materia Medica and Therapeutics in the University of Michigan Medical Department, Ann Arbor. New second edition. In one 8vo volume of 732 pages, with 47 engravings. Philadelphia and New York: Lea Brothers & Co. 1901. [Cloth, $3.75 net.]

The author of this work has a right to feel flattered by the reception given his first edition, which became exhausted in little more than a year. Starting out upon new lines as it did, some trepidation might have been felt as to its success, but now, with the profession practically in accord with the author, no further apprehension need be felt, and this edition is sure to meet the fate of the first—namely, early exhaustion.

Cushny aims to explain the reasons for drug action, and we think he has well succeeded in doing so, though this is one of the most difficult problems in therapeutics. The book is valuable, not alone for what it tells of accepted and acceptable drugs, but for warning against the unfounded claims of remedies that are untrustworthy. In a notice of the first edition (November, 1899,) we pointed out the fact that remedies which fail to withstand a rigid clinical test must stand aside in the treatment of disease. Cushny applies this test with scientific precision throughout his book.

The general plan of the treatise is unchanged, though it is kept abreast of the latest advances. We feel justified in the opinion first expressed of this excellent text-book, and are glad of the opportunity to reaffirm it with additional commendation.

A POCKET TEXT-BOOK OF OBSTETRICS. By DAVID J. EVANS, M. D, Lecturer on Obstetrics and Diseases of Infancy in McGill University Faculty of Medicine, Montreal. 12mo, 409 pages, with 409 illustrations, partly in colors. Lea's Series of Pocket Text-Books. Edited by BERN B. GALLAUDET, M. D. Philadelphia and New York: Lea Brothers & Co. 1901. [Cloth, $1.75, net; full flexible leather, $2.25, net.]

A satisfactory work on obstetrics can hardly be condensed into the limits of a volume like the present, yet with this feeling in mind the reviewer is forced to confess that the author has succeeded admirably. Much is, of course, omitted from necessity, much is abbreviated, sometimes almost to obscurity, but on the whole the book is a good one, and in the practical part of the subject most excellent, because thoroughly modern. M. J. F.

BOOKS RECEIVED.

Fischer—Infant-feeding in Health and Disease. A modern book on all Methods of Feeding. For Students, Practitioners and Nurses. By Louis Fischer, M D, Attending Physician to the Children's Service of the New York German Poliklinik; Bacteriologist to St. Mark's Hospital; Professor of Diseases of Children in the New York School of Clinical Medicine; Attending Physician to the Children's Department of the West Side German Dispensary. Containing 52 illustrations, with 16 charts and tables, mostly original. 368 pages. Philadelphia: F. A. Davis Company. 1901. [Price, $1.50, net.]

Diseases of the Nose and Throat. By D. Braden Kyle, M. D., Clinical Professor of Laryngology and Rhinology, Jefferson Medical College, Philadelphia; Consulting Laryngologist, Rhinologist and Otologist, St. Agnes' Hospital. Second edition, revised. Octavo, 646 pages. Over 150 illustrations and 6 lithographic plates. Philadelphia and London; W. B. Saunders & Co. 1901. [Cloth, $4.00. net.]

The Treatment of Fractures. By Charles L. Scudder, M. D., Assistant in Clinical and Operative Surgery, Harvard Medical School. Second edition, revised and enlarged. Octavo, 433 pages, with nearly 600 original illustrations. Philadelphia and London: W. B. Saunders & Co. 1901. [Polished Buckram, $4.50, net.]

Progressive Medicine. Volume V., March, 1901. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College in Philadelphia, assisted by H. R. M.

Landis, M. D., Assistant Physician to the Out-Patient Medical Department of the Jefferson Medical College Hospital. Octavo, 440 pages. Illustrated. Philadelphia and New York: Lea Brothers & Co. [Per annum, in four cloth-bound volumes, $10.00.]

Cancer of the Uterus. Its Pathology, Symptomatology, Diagnosis and Treatment. Also the Pathology of Diseases of the Endometrium. By Thomas Stephen Cullen, M. B. (Toronto), Associate Professor of Gynecology in the Johns Hopkins University. Imperial octavo, pp. 709, with 11 lithographic plates and over 300 colored and black illustrations in the text, by Max Brodel and Hermann Becker. New York: D. Appleton & Co. 1901.

Manual of the Diseases of Children. By John Madison Taylor, A. M., M. D., Professor of Diseases of Children, Philadelphia Polyclinic; Assistant Physician to the Children's Hospital and to the Orthopedic Hospital; Neurologist to the Howard Hospital, etc.; and William H. Wells, M. D., Adjunct Professor of Obstetrics and Diseases of Infancy, Philadelphia Polyclinic; Instructor in Obstetrics in the Jefferson Medical College. Octavo, pp. 859. Illustrated. Second edition, thoroughly revised and enlarged. Philadelphia: P. Blakiston's Son & Co. 1901 [Price, $4.50.]

A Treatise on Appendicitis. By George Ryerson Fowler, M. D., Professor of Surgery in the New York Polyclinic; Examiner in Surgery, New York State Medical Examining Board; Surgeon to the Methodist Episcopal Hospital; Surgeon-in-Chief to the Brooklyn Hospital,etc. Octavo, pages, 235. Illustrated. Second edition, revised and enlarged. Philadelphia and London: J. B. Lippincott Company. 1900. [Price, $2.50.]

Pulmonary Consumption, Pneumonia and Allied Diseases of the Lungs. Their Etiology, Pathology and Treatment, with a chapter on Physical Diagnosis. By Thomas J. Mays, A. M., M. D., Professor of Diseases of the Chest in the Philadelphia Polyclinic; Visiting Physician to Rush Hospital for Consumption. Octavo, pages, 539. Illustrated. New York; E. B. Treat and Company. 1901. [Price, $3.00.]

Hypnotism. A Complete System of Method, Application and Use, prepared for the self-instruction of the Medical Profession. By L. W. De Laurence, Instructor at the School of Hypnotism and Suggestive Therapeutics, Pittsburg. Illustrated. Chicago: The Henneberry Co. 1901. [Price, $1.50.]

The History of Medicine in the United States. A collection of facts and documents relating to the history of medical science in this country, from the earliest English colonization to the year 1800. With a supplementary chapter on the discovery of anesthesia. By Francis Randolph Packard, M. D. Octavo, pp. 542. Illustrated. Philadelphia: J. B. Lippincott Co. 1901. [Price, $4.00.]

The Student's Manual of Venereal Diseases. By F. R. Sturgis, M. D., sometime Clinical Professor of Venereal Diseases of the Medical Department of the University of the City of New York, etc. 12mo, pp. 216. Seventh edition, revised and in part rewritten by the author and Follen Cabot, M. D., Instructor in Genito-urinary and Venereal Diseases in the Cornell University Medical College. Philadelphia: P. Blakiston's Son & Co 1901. [Price, $1.25.]

Retinoscopy. In the determination of refraction at one meter distance, with the plane mirror. By James Thorington, A. M., M. D., author of "Refraction and How to Refract;" Professor of Diseases of the Eye in the Philadelphia Polyclinic and College for Graduates in Medicine. 12mo, pp. 89; 51 illustrations, 12 of which are colored. Fourth edition, revised and enlarged. Philadelphia: P. Blakiston's Son & Co. 1901. [Price, $1.00.]

Harrington's Practical Hygiene. For Students and Practitioners of Medicine and Medical Officers By Charles Harrington, M. D., Assistant Professor of Hygiene in Harvard Medical School, Boston. In one very handsome octavo volume of 718 pages, with 105 engravings and 12 full-page plates in colors and monochrone. Lea Brothers & Co., Publishers, Philadelphia and New York. 1901. [Cloth, $4.25, net]

LITERARY NOTES.

MESSRS. LEA BROTHERS & Co., of Philadelphia, announce for early issue A Practical Treatise on the Blood and Its Diseases, for practitioners, laboratory workers and students, by James Ewing, M.D., professor of pathology in Cornell University Medical College, New York. This will be a handsome octavo volume of about 450 pages amply illustrated with plates and engravings.

In view of the recent rapid advances in the knowledge of the pathology of the blood, and the numerous and practical applications of this knowledge in clinical diagnosis this book, representing authoritatively as it does the most modern discoveries and achievements, will no doubt meet with a warm welcome.

THE New York University, beginning with February, 1901, publishes a bi-weekly bulletin, which takes the place of the annual circulars heretofore issued. One of the new features is the *Bulletin of the Medical Sciences*, which is to be devoted to reports of research and discovery in medicine, is to contain no advertisements, is not issued for profit, but, on the contrary, will cost the University money to publish. The engraving of a single page in the second number is to cost $300.

MESSRS. BATTLE & Co., St. Louis, Mo., have issued Chart No. 3 of the series illustrating fractures of long bones. This relates to fracture of the femur above the condyle, and, like the others, is printed in color. It presents graphically this important injury, showing the relation of the broken bone to the soft parts. It will be sent on application to the publishers.

THE *University Medical Magazine*, Philadelphia, will hereafter be known as the *Medical Bulletin of the University of Pennsylvania*. It will contain no advertising matter and its form has been changed into a size which we abominate. Why medical publications continue to issue in a size so inconvenient that they neither are read nor preserved, we are at a loss to understand. The policy and scope of the publication remains practically unchanged; it continues to be the official journal of the medical department and departments allied to medicine, of the University of Pennsylvania Medical Society and of the William Pepper laboratory of clinical medicine. Its contents will consist of original articles, complete and carefully prepared digests of the most recent literature upon a subject of practical or scientific importance, alumni notes and book reviews.

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Original Communications.

EXPERIENCES WITH THE RECENT EPIDEMIC OF RABIES IN BUFFALO, N. Y.[1]

By ERNEST WENDE, M. D.,
Health Commissioner, Buffalo, N. Y.

AN important fact to be gathered from history, is the liability of human beings to be attacked by diseases of a contagious nature, transmitted through the agency of inferior animals. These diseases often present such unusual features of interest, and severity as to engage the serious attention of the local health authorities, and alarm the public generally. And none more so than rabies, on account of its cruel character, distressing anxiety, mortality, its ever present source—the dog, and the unfortunate dispute as to its actual existence. It is a much easier and more popular task to dilate concerning the habits and good traits of this inseparable companion, than to describe the peculiar morbid manifestations which can not be considered apart from or independent of the other mammalia that have been infected through his bite. It must be viewed in conjunction with man, if we would hope to form a just, enlarged and correct idea of its true significance and pathological affinities. It is one associated with misconception and ignorance, which entails a large amount of needless and woeful suffering, and even death.

It is not my intention to make a thorough analysis of this interesting subject, nor to discuss its antiquity, extent or origin, but merely to record a few facts and experiences that are especially connected with the epidemic of rabies, circumscribed within certain bounds in and about the City of Buffalo, N. Y., and now practically under control.

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[1] Read before the Pathological Society of Rochester, January 17, 1901.

I wish to accentuate that the malady was first observed in November, 1898, in a pug-dog, owned by Edward Sherk, residing in the Kenmore section of the city, followed by a cow being attacked, the property of Charles Hand, and, later, by a horse of White's livery stable, on Jersey Street, the latter dying and the former being killed.

These were followed by a number of isolated cases, scattered throughout the city, at varying intervals, until June, 1899, when a stray dog acting strangely, appeared in Alden, N. Y., and bit a dog belonging to Ira Mann, which subsequently went mad, ran amuck biting several dogs, and among them, it was surmised, the large Newfoundland owned by George Cook. He was of a playful and tractable disposition. He had never strayed from his master's threshold. He was everybody's crony, the pet of the neighborhood, the willing comrade and frolicsome playmate of the village school children. It would almost seem that he was too gracious an animal, in the process of time, after catching the infection to have become frenzied and furious, and to have wandered miles from home, snapping at everything alike, whether animate or inanimate, and biting three men, two horses, four cows, and God knows how many dogs.

Of the men, J. Getz was attacked and severely bitten in the arm, near Wende Station, a distance of four miles from the home of this once affectionate animal. Otto Seihl was bitten in the hand, at Looneyville, a mile or more further on, and S. J. Walter, likewise, was bitten in the hand in the Township of Lancaster, at a remoteness of at least ten miles.

The Department of Health to arrest this terrible infection of these men intrusted to its care did not hesitate to advise them to take immediate advantage of the treatment to be obtained at the Pasteur Institute, New York, for, with human life at stake, it saddened the heart to think that chance should rule, where law ought to reign. These, then, were our first cases to leave Buffalo for the special treatment of this unique and mischief-making complaint.

Of the horses bitten, one died; of the cows, three; while the dogs were mostly killed, leaving but a few to be securely housed for demonstration and observation of facts; however, only to see them grow uneasy, develop the disease and die.

Somewhat later, at Derby, N.Y., a singular tramp dog also turned up, behaving in an uncustomary manner, and, before being shot, bit seventeen dogs and two cats, all of which were promptly destroyed. These two cases mentioned must suffice to illustrate the deadly work that can be perpetrated by a single mad dog, for similar instances have been so frequent with us that it would be tiresome to try to enumerate them all.

Verification of the true nature of the malady was made in numerous cases by Drs. Bissell and Carpenter, bacteriologists of the Department of Health of Buffalo, with the result of uniformly finding the diagnosis to be correct. Further verification was had in portions of the brain of dogs sent to Professor Moore of Cornell University and the Bender Laboratory at Albany, notably in one case—the Roquet case—where the dog presented but vague evidence of the malady. Direct inoculations upon fox terrier dogs were made jointly by Dr. John Wende, veterinarian, and Dr. Carpenter, of the Health Department, from rabid dog brains, with the result of developing the malady on an average of the twenty-third day.

In a communication, to me, from Deputy Commissioner W. C. Patrick, of the State Department of Agriculture, I am able to give the following illustrative cases of the epidemic in the rural districts. One vagrant dog bit one calf, one cow and possibly others. Calf and cow both died with pronounced symptoms of rabies. A second vagrant dog bit one calf and three cows, of which the calf and two of the cows died—undoubted signs of rabies. A third vagrant dog bit one horse and one cow, both died, typical rabies. A fourth vagrant dog bit one horse, two hogs and one cow; all died with rabies.

These animals belonged respectively to LaSalle Tabor, Frederick Boldt, Marilla; James Vine, Alden; W. J. Romeing, Abel Seeley, Christina Frazer, B. J. Stockwell, Lockport.

These dogs were all acting strangely when observed, were aggressive, and bit without provocation, and attempted, though failed, to bite many other animals. The animals bitten, and which died, were particularly examined and studied, and their malady diagnosticated as rabies, by Dr. Kelley, State Veterinarian, Albany, N.Y., and Dr. Anderson Crowforth, Lockport, N. Y.

The question of municipal control for the restriction of the spread of rabies is most important, presenting many peculiar aspects. The experience of the Department of Health in securing legislation in the interest of public health shows that such procedures can not be obtained without strong opposition from certain classes, some, undoubtedly, well-meaning but not well-informed, others well-conned but not well-disposed.

Ordinances relating to sanitation, contagious disease, and the regulation of the practice of medicine, have all been born with opposition that has ultimately fallen into merited oblivion, but in none has there been such unreasonable, violent antagonism as towards measures directed to restrain the possibility of injury from dogs. It would appear by those referred to that the possible discomfort of dogs was of more moment than the protection of human beings. Muzzles were objected to as cruel; leashing and chaining as injurious to their health, while evasion of the dog ordinance, regulating the action of animals most likely to be infected, is practised and justified from a sense of false sentiment or morbid heroism. It was obvious that no laws, however good, could be substituted for good citizenship, and it was evident that the public is much to blame for this apathy, carelessness, opposition and cussedness.

The presence of a multitudinous dog population in a community serves no good purpose; their diminution and restriction is indicated and should be accomplished. They should be permitted only under restraint of safeguards. It should be the policy of the authorities of all large cities to have regulations of such character as would cause not only a decided decrease in the number of worthless curs usually prevalent, but would limit their character and ownership to those most desirable, thus benefiting the community and the dogs themselves, which, in relation to rabies, would mean less material, less menace, and greater facility of control. Unless every care is taken, each individual case is liable to start an epidemic. Only those who make a special study of this question can be fully impressed with its importance. The extreme ignorance of the public generally, in this matter, is a fact admitted by all capable of judging on the subject, and is, indeed, manifested by evidence of the most abundant and notorious kind. The most false and most absurd notions are entertained respecting the whole subject and respecting the means capable of removing it. The prevalence of rabies in large municipalities is a grave danger, not only to the well-being of the community itself, but to all the surrounding territory, and equally pernicious, if not more so, are the so-called anti-rabic wiseacres who trade upon opposition, which, unfortunately, obtains to such an extent in these days, and is, in my opinion, unmitigated insincerity of the most detestable description. Here, as elsewhere, it is apparent that their mind can scarcely ever escape from the conventional thraldom in which it has been nursed. They naturally oppose and restrain the unselfish efforts of the sanitarian in his attempts to blot out sickness, sorrow and suffering, by dodging the truth and working upon the ignorant to deceive the public, and to increase their own consequence. Like the witches and impostors that have always held competition with physicians, caring nothing for the safety and health of the public, but continually striving to induce it to swallow falsities for facts. I have often wondered if it ever occurred to them that such misery and death might be entirely prevented.

At any rate, and in all events, it is the duty of an honest mind, on attaining conviction of an error, to abandon and to explain it, even although the truth that is sure to succeed it, may, as yet, be seen only darkly, or be entirely hidden.

Therefore, every city, in dealing with dogs, should be provided with efficient rules, regulations, and ordinances, and demand their rigid enforcement, the features of which should embody: (1) Police supervision, registration, tagging, a large license fee and penalties; (2) capture and destruction of all dogs at large, not so registered and tagged; (3) muzzling and leashing all dogs when at large; (4) distribution, by police, to registered dog owners, of cards, educational in character, giving information concerning care of dogs, rabies, ordinances, penalties; (5) periodical police house to house census to determine that such regulations are in force; (6) stringent quarantine against all localities known to contain this disease; and additionally during periods of epidemics; (7) a large force of extra dog-catchers to raid the streets, catching, for destruction, all unmuzzled, unleashed and unlicensed dogs; (8) police instruction to destroy such animals, whenever found practicable, by shooting; (9) destruction of all dogs, cats or other animals bitten under even suspicious circumstances; (10) Immediate cleansing and disinfection, under supervision, of stables and premises where animals have been harbored suffering from rabies; (11) the destruction, by fire or through cleansing with hot soap suds and disinfection, of kennels, bedding and feeding utensils; (12) the skinning of carcasses of animals dying from rabies or suspected to have died from rabies should be strictly forbidden; (13) all carcasses of animals that have suffered from rabies, real or suspected, should be rendered harmless by cremation; (14) prohibition to cure any animal suffering from rabies, or being suspected of suffering from rabies, without official permission; (15) the transportation, if ever necessary, of animals having or suspected of having rabies, should only be performed in a closed vehicle or receptacle.

By this combined system of raiding and police action, rapid extermination is effected. Both methods are considered actually necessary on account of the dog-catching system being so possible of evasion—owing to the fact that the whereabouts of these officials spread like wildfire, dogs are secreted, and efficiency is thereby crippled. Therefore, in order to gain speedy protection, to succeed in suppressing an epidemic of this nature, the community at large must graciously express a willingness to accept the indicated procedures.

Briefly, the prominent clinical characteristics of the Buffalo epidemics were: (1) History of altered behavior of the animals, they showing irritability, restlessness, changed disposition; (2) desire to swallow foreign bodies, wood, stone, glass, dirt, grass, etc.; (3) a tendency to stray; in the majority of instances, the dogs left their homes, wandering away for one or more days, an act unknown in their previous lives, and returning in a bad condition—sick.

Of all the symptoms, in the furious stage, none were so constant, characteristic and diagnostic as the alteration in voice; almost every dog manifested this evidence of paralysis of the vocal chords in the hoarse howling bark, changing into a high pitched falsetto-like note.

All were characterised by biting and snapping at imaginary objects to furious aggression towards anything before them—the floor, bucket of water, sticks, any article, in fact, within their reach. Many would hold on so tenaciously to objects held before them, as to be able to be lifted by their hold, and moved from one place to another. A marked symptom observed in cases of the furious form, and one to which attention has apparently not been called or observed, and which may become a strong differential diagnostic point, was the absence of any inclination, on the part of dogs, to shrink or retire from impending blows or attacks.

Ordinarily, a dog, approached with a club in the attitude of a coming blow, recedes, dodges, and evades it. In dogs, however, with this malady, blows could be aimed directly towards their eyes, face or head, without their giving any evidence or appreciation of the impending danger to them of possible injury or pain. This was so noticeable as to be commented upon by even non-professional persons, and was demonstrated over and again. Of course, when objects were held before them, or were coming towards them, they would frequently attack them viciously, blindly, but, between the paroxysms of fury, when quiet, dogs approached with a club aggressively as stated would pay no attention, the act being unappreciated. This is not the case with all well dogs who, under such circumstances, depending upon their dispositions, appreciate the movement and either endeavor to evade or retire from it or attack it. This feature, noticed in rabies, I believe to be characteristic and, if experience in this epidemic is a criterion, it will be found in the future when looked for.

Another symptom noticed and, heretofore undescribed, when spasms of muscles of deglutition were violent, was a pouching out of the throat, visible externally. When present in this degree, these spasms were followed by relaxation of the sphincters and involuntary defecation and urination.

At the dog pound from the inception of the epidemic up to December, 1900, there were destroyed nearly 6,000 dogs, among which were 95 furious and 38 dumb cases. From April 1, 1899, to December 31, 1900, the Department of Health investigated 315 cases of persons bitten by dogs. Of the 41 persons bitten by rabid dogs in the city, four died in the agonies of hydrophobia. A synopsis of their cases seems pertinent on account of their rarity.

William Barry, living in the Township of Cheektowaga, at the city boundary, had a mixed breed collie watch dog. The child of one of his near neighbors, Tresselt, eight years of age, in passing the gate on his way home from school, was, without provocation, bitten by the dog which, at the time, was loose in the yard. On Barry's return to his home, and the fact of the biting being reported to him, he searched for the dog; found him secreted under the barn, and in securing him was bitten slightly on the hand himself. The dog was killed and taken to the bone-yard, when, on opening his stomach, it was found to contain sticks, stone, grass and other foreign bodies. No further consideration was, apparently, given to the matter of the biting beyond ordinary medical attendance at the time.

Eighty-one days later, however, the Tresselt boy was taken sick and died on the fourth day in great suffering, his illness presenting a picture of rabies in the human being. The symptoms were general malaise followed by rapidly developing irritability of the nervous system; mental depression, wakefulness, apprehension, strained or anxious expression of the face, hoarse voice. By the second day these features were intensified and mild convulsions occurred, particularly of the throat. Fluids, water, and the like, on being attempted to swallow precipitated these spasms. During this period there was a slight temperature which gradually increased to 102°.

From the unusual nervous irritability, expression, spasms, intensified in throat and excited by attempts to drink, the family physician, Dr. Danser, without any knowledge of a dog having bitten the child, made the diagnosis of hydrophobia, when inquiry revealed the fact that eighty-one days previously he had been bitten by Barry's dog. The boy died on the fourth day in a state of coma which had been preceded by intensification of all the symptoms, particularly those relating to deglutition, nervous irritability and mental apprehension. So intense was his nervous condition that the boy had to be held on his mother's lap constantly.

Peculiar features of the case, as observed by Dr. Heath and also myself, were the spasms of the throat, the mental condition of apprehension and expression of face. This was peculiar, it being one of intense anxiety and fear on a pallid countenance with blue lips and lividity over the molar bones which, in contrast with the sunken, staring, glassy eye, presented a picture of singular aspect.

The death of the boy brought a realisation of the possibilities of the case to Barry, who was despatched, without delay, to the Pasteur Institute in New York, for treatment, where he died under similar circumstances, the disease developing in him just two days later than in the boy.

Autopsy of the Tresselt boy, which was performed by Dr. W. H. Heath, of the Health Department, showed boy well developed; some emaciation; rigor mortis slight; skin cyanosed, particularly in dependent part of the lips; mucous membrane of the mouth and throat more especially swollen, dark colored and congested; larynx and large bronchi reddened, swollen, an excess of tenacious mucus present; lungs moderately congested; heart in diastole contained death clot, and large vessels filled with dark, heavy blood; stomach normal; liver very full of blood; kidneys normal; bladder contained small quantity of urine, no albumin; brain—intense congestion over the cortex, most marked posteriorly and over medulla extending down and fading away over six or seven inches of upper cord; on section, red punctated points of engorged capillaries present; membranes edematous and not adherent; autopsy showed no pathognomonic lesions; death due to exhaustion and heart failure.

Case III.—A. F., a strong vigorous, exemplary young man, while attending a dance, a stray fox terrier dog wandered into the dance hall acting peculiarly. Fisher attempted and succeeded in throwing the dog out, but was bitten in the hand in so doing, as was also a second young man who had attempted it just previously. Neither of them paid any attention to the incident, further than to have their bites cauterised and properly dressed at the Fitch Hospital. On or about the thirty-six day he was taken ill with symptoms of an indefinite character, but which soon developed into a typical case of hydrophobia, when he was removed to the Buffalo General Hospital, dying there in the greatest agony after an illness of but four days.

The facts of his illness were that he was taken sick with gradual increasing irritability of the nervous system, headache, general depression—physical and mental—and tremor, to such an extent that he was scarcely able to hold the tools of his trade at which he was endeavoring to work in spite of his condition.

Dr. Edward Meyer was called and sent his assistant who reported he did not know what ailed the man, but that he was peculiarly sick. Dr. Meyer, who then saw him, reports that he found him suffering from intense headache, a peculiar nervousness, "that the bed he was in looked as if fourteen different kids had played in it," anxious expression, some spasms or twitchings, and difficulty with the throat. On being given fluid to swallow, a teaspoonful of milk produced spasms of muscles of deglutition. Upon this suspicious circumstance, the doctor learned that some time previously he had been bitten by a dog under suspicious circumstances and the diagnosis of hydrophobia made and the man removed to the Buffalo General Hospital.

I saw this case at the Hospital where he presented a fearful picture. Convulsions were present in such a degree that the subcutaneus tissues were ruptured, permitting a general cellular emphysema around the neck and thorax, giving the man a most hideous appearance. It was necessary to have him tied down to the bed and otherwise restrained. During the interval between some of the spasms he asked to be loosened which was done, when it required the combined strength of several men to restrain him. While being carried from one room to another, to insure quiet, he was seized with one in the hall in which he died. During this time and in the intervals of spasms, he was conscious, rational, spoke. He expectorated profusely. His inability to swallow was absolute and his temperature elevated.

During the time he was in the hospital, his case was observed by a number of prominent physicians, all of whom diagnosticated the case as typical, also considered it one of the most cruel deathbed scenes in their experience. The other man who was bitten disappeared, but was finally found with some difficulty and sent to the Pasteur Institute, at New York, for treatment, and it is gratifying to note that he escaped the fate of his companion.

The fourth case of death from rabies in human being was in the person of Mariana Dolitski, of 375 Peckham Street. She was under the care of Dr. Emil Lustig, one of our prominent East Side physicians, and died, after a three days' illness, from typical hydrophobia. The death certificate of this case, as in the others, are on file in the office of the Registrar of vital statistics.

The procedure recommended by the Department of Health and followed during this epidemic was, locally, the application of a ligature around the parts where feasible, and thorough cauterisation with nitrate of silver—carbolic acid, antiseptic dressing, free drainage; bleeding should be encouraged. It is not believed that any local application would positively prevent the development of rabies in a person bitten by a rabid dog, but is urged as prevention of local septic condition and as contributing to allay mental apprehension, nervousness.

There is no general treatment, save that of prophylaxis by what is known as the Pasteur treatment, with which you are all familiar. Its success has justified its use in every instance where indicated. In the presence of the malady itself in man, the indications are to prevent irritation, prolong life, allay spasm. How futile the endeavor to fulfill these indications we all know. Cocaine to the fauces, and chloroform for spasm. Morphia and curare have been recommended but, in reality, exert no influence over the course of the disease.

Those who dispute the existence of this disease and its fatal consequences, likewise assail the honesty of Pasteur's great work, the usefulness of the Pasteur Institutes and the integrity and even commercial honesty of those who operate them.

Our experience and the deduction best drawn from it is briefly as follows: There were sent to New York, for this treatment, a total of thirty-seven persons. These individuals were all bitten by dogs pronounced rabid after careful examination by Dr. W. H. Heath of the Department of Health, a graduate of the University of Pennsylvania, and lately of the Marine Hospital Service. The doctor brought to this work the proper training, education and reputation, and further, a strong personal interest, all of which is referred to as evidence of the correctness of the deductions and weight of opinion. During this epidemic, many prominent physicians were induced to make personal examination for themselves of the nature and character of the malady, and the various phases of it present in different cases. Of these, many were known to be dog owners, skeptical, or non-believers in hydrophobia, and it is gratifying to note, that, with that honesty characteristic of the true medical man, there was no difficulty nor hesitation in recognising the malady, nor in acknowledging their previous erroneous views.

One of these gentlemen, Professor Charles Cary of the University of Buffalo, in undergoing this change of opinion, considered it his duty to exhibit a case of the affection to the medical class of the University and give a clinical lecture thereon.

The subjoined list contains the names, addresses and dates of admission of patients sent from Erie County to the Pasteur Institute for treatment in 1899:

J. Getz, Wende Station, July 20.
O. Seihl, Looneyville, July 22.
S. J. Walter, Lancaster, July 22.
T. B. Barry, Sloan, August 8.

J. Barrett, August 13; C. M. Dake, August 14; H. Roquett, August 25; G. Gerome, ———; R. Fairchild, September 7; Dr. F. A. Crandall, September 5; W. C. Hebard, September 8; E. H. Hadley, October 8; Miss D. Page, October 8; R. Page, October 8; E. Brotherton, October 8; B. Archangelo, October 8; W. Reese, October 17; Miss L. Montgomery, October 17; H. Williams, October 20; Mrs. B. Hines, October 28; W. H. Burke, November 3; E. O'Leary, November 6; J. Herb, November 24; Miss L. Sorgel, December 13, all of Buffalo.

M. Schwartz; Hamburg.

In 1900 were the following: W. C. Wickham, January 9; J. Klahn, January 18; P. W. Miller, January 23; C. J. Wade, January 28; F. Lanck, January 28; W. Wiener, February 17; C. Zimmerman, March 1; G. Wende, April 27; O. Mertz, April 27; Freddie Stewart, August 31; John P. Hantges, September 10; B. S. Erskine, November 8, of Buffalo.

This epidemic demonstrated the fact that, at least, in this section, popular misconception concerning certain features of hydrophobia continue to exist to a large extent and had to be contended with, viz: that after dog bites, in event of the dog becoming rabid, the person bitten would become likewise affected; that dogs should be killed at once to prevent themselves from becoming liable to the malady, and singularly, no reference was made, at any time, in press or letters to the press, to the superstition and curative properties of the mad-stone.

To the writer, it would appear superfluous to seriously present facts substantiating the existence of the malady in dogs and its communication to man, were it not that a number of well-meaning, no doubt, but misguided persons exist who take the opposite view to the detriment and injury of their fellow-beings.

When consideration is given to the fact that governments abroad recognise the malady and make provision for it, that it has been the subject of investigation and demonstrated to be a malady of the most horrible possibilities, and by men of the highest ability and undoubted integrity, that it is considered in all classifications of disease, in all courses of medical education, in all text-books, it seems incredible that there can be found any to dispute the question. As the anti-vaccinationists seek, for other reasons than the true one, to explain the subjugation of smallpox, so do these persons seek, by the most untenable way in the light of facts to explain this malady. They can not or will not see the simple fact that dogs get a fatal malady, inflict fatal wounds upon dogs and man with fatal results, and that it is possible to practically and successfully avert these consequences in man through a treatment which is based upon the correctness of views held by medicine concerning it, they are so strenuous to deny in this connection.

471 Delaware Avenue.

RABIES.[1]

By MAZYCK P. RAVENEL, M. D., Philadelphia, Pa.,
Bacteriologist of the State Live Stock Sanitary Board of Pennsylvania.

FEW diseases have been known and described for as many centuries as rabies, yet there are perhaps none about which so many misstatements are made, or such erroneous opinions held, not only by the public who are not expected to be students of disease, but also by those whose profession leads them to the investigation of such matters. Some of these false ideas have no doubt come down to us from the days when the origin of all diseases was shrouded in mystery and epidemics were looked upon as the visitations of offended deities. It cannot be denied that rabies has resisted the probe of moden research with great persistence, and on this account perhaps the old notions have clung to it. On the other hand, however, there is too often seen an apparent disposition to deny the most palpable facts concerning it, an attitude which has hindered the spread of knowledge and checked a fair investigation.

More than 300 years before the birth of Christ, Aristotle wrote, "Dogs suffer from madness which puts them in a state of fury, and all the animals they bite when in this condition, become also attacked by rabies;" a statement which shows even at this early date a clear recognition of the communicability of the disease by the bite of the dog. In the first century A.D., Celsius alluded to rabies in man and first employed the term "hydrophobia." From this early period to the present time, with the exception of the middle ages, there has been frequent mention of outbreaks of rabies, and descriptions given which prove that the disease was well known, and in all respects identical with what we are only too familiar at the present day. As early as 1591 the transmission of rabies to man by the bite of wolves is recorded. During the last part of the eighteenth and first part of the nineteenth centuries, rabies spread over the whole of Europe, and numerous epidemics were noted during the century just closed. In the face of this mass of testimony it is amazing that there are still men who profess to doubt the existence of such a disease at all, or if they acknowledge this, deny its transmissibility to man. The ravages of rabies during the last century drew to it the attention of many of the most able men who have adorned the ranks of the medical and veterinary professions. Without detracting from the work of any of these, it is safe to say that to Pasteur we owe the larger part of our exact knowledge regarding the nature of this fearful malady, and to his masterly researches are due the preventive inoculations, which are justly regarded as one of the greatest triumphs of medicine in any age. With the completion of this work our knowledge of rabies was largely extended. We know the clinical picture in man and in many of the lower animals, the symptoms which foretold so surely a prompt and awful death, the distribution of the virus in the system of the affected man or animal, its behavior under many conditions, how its power could be increased or diminished at pleasure, its mode of transmission from animal to animal, and even the method of guarding against infection, yet with all this knowledge we were entirely ignorant of the exact nature of the virus, as indeed we are at the present day, and we knew of no characteristic change in any part of the body which enabled us to say whether or not the animal had died of rabies.

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[1] Read before the Pathological Society of Rochester, January 17, 1901.

The absence of distinctive post mortem lesions has no doubt given some ground to the skeptics for their attacks on the reality of the disease. As has been well stated by Babès, it would seem "that this disease so clearly characterised by a train of symptoms, constant in their character ought also to present characteristic lesions in the nerve centers, and especially in the ganglia, which preside over the production of symptoms," an opinion which has been generally accepted and acted on by many students, their object being not only to disclose the cause of the striking symptoms, but also to find methods of diagnosis more rapid and more certain than any yet known.

Rabies is an acute infectious disease, due to a specific virus, which is inoculable, and usually transmitted from one animal to another through the saliva. Under what may be called natural conditions, the disease occurs chiefly in the canine race, though all mammifers, including man, and many birds are susceptible to it. Transmission to man is practically always through the bite of a dog or wolf, and more rarely of the fox.

The exact nature of the virus is unknown, but there can be no doubt that it is some organism which has the power of growing and multiplying in the body, and of forming a toxic substance which has a selective or specific action on the central nervous system. It is found most concentrated and purest in the medulla oblongata, though all parts of the brain and cord contain it constantly. It is excreted principally by the parotid gland, but also by the other salivary glands, the lachrymal gland, the pancreas and the mammary glands. The virulence of the saliva may be entirely removed by filtration through porcelain, proving that it is due to some solid substance which the filter retains. The virus is never found in the blood, liver, spleen or kidneys. Absorption of the virus through unabraded mucous surfaces is said to occur in rare instances. It has been proven by Nocard and Roux that the virus may be contained in the saliva, at least three days before the animal shows any signs of illness, and it is known also that even the strongest virus remains in the central nervous system for some time before producing recognisable symptoms. Experimentally, the disease is reproduced most certainly and with the greatest certainty by the injection of a portion of the medulla under the dura mater of the brain, but it follows almost as surely when the injection is made into the anterior chamber of the eye or into one of the large nerve trunks, though not so rapidly. Subcutaneous inoculation cannot be relied upon, as the nerves are not always injured, but inoculation into the substance of a muscle seldom fails to produce the disease, especially if the part has a rich supply of nerves. Inoculation into the circulation succeeds at times in small animals, but not in large ones like the horse or cow.

In the vast majority of cases, both in man and in animals, rabies is produced by direct inoculation of the virus contained in the saliva of a rabid animal, the introduction being effected through wounds inflicted by the teèth. Having gained entrance through the skin the virus may remain for a long time at the site of the injury. It travels along the nerve tracts towards the central nervous system where it remains for a time, no doubt increasing in quantity before the typical symptoms are produced. This mode of transmission along the nerves can be proven in several ways. When the inoculation has been made in the sciatic nerve, for instance, the invasion of the brain and medulla can be prevented by section of the cord. Also, if we inoculate an animal in the leg, and kill it after a time, but before symptoms of rabies appear, the nerves of the leg will be found to contain the virus, and often also the portion of the cord which receives the nerves, while the brain and rest of the cord are free from it. The circulation and lymphatic system probably at times take part in the absorption and distribution of the virus also.

The danger of inoculation after the bite of a rabid animal, as well as the time which may elapse between the injury and the appearance of symptoms, is determined by (1) the seat and extent of the injury, and (2) the quantity and strength of the virus. Deep and lacerated wounds about the face and hands where the nerves are abundant are particularly dangerous, and the period of incubation short, while slight wounds, made in portions of the body covered by clothing, or where the skin is thick may be followed by no ill-effect, or else only after a long period of incubation. Among the lower animals it is known that dogs with long hair, such as the poodle and spaniel, are less often affected than short haired species, and that sheep are more liable to contagion when shorn. The protective influence of clothing may be shown experimentally by exposing rabbits to the bite of a mad dog, some shaven and some with fur intact. A large proportion of those bitten through the fur will escape, even when the teeth have passed well into the skin. The saliva with its contained virus is wiped off by the clothing or fur in these cases. The bite of carnivorous animals is much more dangerous than that of herbivorous, and the bite of wolves is especially fatal. This is due probably in part to their savage attack, inflicting extensive wounds about the face, and in part to a greater strength of the virus, as found in this species. Thus the former mortality from the bite of wolves is placed at 40 to 60 per cent., while that from the bite of dogs is only 16 per cent. The Pasteur preventive treatment is also said to be somewhat less effective against the bites of these animals.

Post Mortem Diagnosis. — As has been said, there are no anatomical changes which enable us to make a post mortem diagnosis with any degree of certainty. The presence of foreign bodies, such as pebbles, wood, air, straw, etc., in the stomach, and the absence of food, is indicative of death from rabies, but the only sure means of diagnosis heretofore has been the inoculation of animals with a portion of the brain or spinal cord of the suspected dog, a procedure which is often attended with difficulty on account of the poor condition in which much material is collected.

It is needless to dwell on the anxiety of the family of a person who has been bitten by a dog suspected of rabies, and of the patient himself, while awaiting the tardy verdict of inoculation; or on the value of the time that may be lost in instituting preventive treatment. It is hard to overestimate the importance of a simple and positive method of rapid diagnosis.

A short review of the work done by different observers with this object may be of interest:

The first step in this direction seems to have been due to Pollailon and Nepveu, who described the lesions observed in a man who had died of rabies. They noted that the whole cerebrospinal axis was strongly congested, and that the ganglion of Gasser was hyperemic and infiltrated with round or oval cells, some of them being hyaline in appearance, and which they considered "probably epithelioid cells from the capsule of the ganglion cells." The work of Balzer, calling attention to the changes in the central nervous system, was followed in 1874 and 1875 by Benedikt's article, both authors described the distention of vessels in the nervous centers, accompanied by an extravasation of erythrocytes and leukocytes into the perivascular spaces. Kolesnikoff, in 1875, described besides an invasion of the pericellular spaces by round cells occurring in the hemisphere, cerebellum, spinal cord, and the sympathetic and intervertebral ganglia. Schaffer also made a careful study of the vascular and cellular changes found in the case of a man, and called attention to a hyaline and fibrillar degeneration and vacuolation of the cells of the anterior horns of the cord. In 1886, Babès concluded as a result of numerous researches, made in man and in dogs, both natural and experimental cases, that the essential lesion of rabies consisted in an accumulation of embryonic cells in the neighborhood of the central canal, and especially about the large modified cells of the motor centers of the bulb and cord. Writing again in 1892, Babès reaffirmed his observations and insisted on the profound changes taking place in the nerve cells. He held that it was possible to make a rapid diagnosis of the disease by a microscopic examination of the bulb and cord. He described in the bulb what he considered the diagnostic lesion of the disease—namely, the pericellular accumulations of embryonal cells described by Kolesnikoff, and for which he proposed the name "rabic tubercle." The cells of the bulbar nuclei undergo degeneration and present the various stages of chromotolysis. There is loss of the prolongations and a progressive modification and even total disappearance of the nuclei, a dilatation of the pericellular space, and an invasion not only of this space but also of the nerve cells by embryonal cells, and at the same time small corpuscles which are hyaline, brownish, and in parts metachromatic. Many of the nerve cells become surrounded by a large zone of embryonal cells, and when the cell is completely degenerated these occupy the cell area and constitute the rabic tubercle.

Since 1891 Babès has examined the bulb of 487 dogs, controlling his results always by inoculation of rabbits. His results have led him to trust this means of diagnosis and he still holds it to be one of the best means of rapid diagnosis at our disposal, although except in Babès own laboratory the method does not seem to have been practiced, at which he expresses a surprise, which appears justifiable. Recently Nélis, working with Van Gehuchten, discovered in the spinal ganglia of two men who had died of rabies, and of a number of animals, peculiar changes which they considered to be the diagnostic lesion of the disease. They have confirmed all the lesions described by other authors, but in addition have noted what they considered to be more diagnostic than any other. The most profound, the most constant, and the earliest lesions are noted in the peripheral, cerebral and sympathetic ganglia, and the changes are especially marked in the intervertebral ganglia, and in the plexiform ganglia of the pneumogastric nerve. Normally, these ganglia are composed of a supporting tissue holding in its meshes the nerve cells, each one of which is enclosed in an endothelial capsule. The changes characteristic of rabies consist in the atrophy, the invasion, and the destruction of the nerve cells, brought about by new formed cells derived from the capsule, which appear between the cell body and its endothelial capsule.

These new-formed cells increase in number, invade the protoplasm of the nerve cell, and finally completely occupy the entire capsule. These changes are widespread, but few capsules remain unaffected, and in advanced cases the section has very much the appearance of an alveolar sarcoma. The changes vary in intensity in different animals. They are most marked in the dog, less in man, and less still in rabbits. In dogs and rabbits the changes are more marked in the cerebral than in the spinal ganglion. The authors have considered in detail the findings of previous workers, but without exception they consider them as secondary and without any importance, either in the production of symptoms or in making a diagnosis. They hold that Babès has attached an undue importance to his rabic tubercle. In their first publication they held that "these lesions are specific of the rabic infection, if not by their nature, at least by their localisation." In a later note, in answer to objections raised by Nocard and others, Van Gehuchten says that "the lesions of the cerebrospinal and sympathetic ganglia which he and Nélis have discovered are not specific of rabies in general; they are only specific of the disease as it occurs naturally." It is to be noted that the authors have made no claim regarding an early diagnosis of rabies, but only a rapid method. Van Gehuchten says his method "concerns not a precocious diagnosis, but only a rapid diagnosis in rabies." This has been further shown by the experiments of Cuillé and Vallée, who, after inoculating dogs with the virus of rabies, sacrificed them at various times after the appearance of symptoms. They found that in animals in which the disease had just become manifest the lesions in the plexiform ganglion were slight or absent. They conclude that as a means of diagnosis the method of Van Gehuchten and Nélis has great value in the case of animals in which the disease has run its full course, ending in death.

The subject has been studied also by numerous veterinarians of note in Europe, notably Dégive and Hebrandt of the State School at Cureghem, and Nocard and Vallée of France, all of whom have obtained results confirming the value of the discovery. Quite recently, Crocq has made a most thorough and complete review of the literature on the subject and a study of the method. He believes that Van Gehuchten is mistaken in considering the perivascular and pericellular neo-formations described by Kolesnikoff and Babès as unimportant changes and believes that by their constant character, their localisation and evolution they have a considerable diagnostic value. He says: "The lesions described by Babès, and Van Gehuchten and Nélis, are both remarkable. They are so great and clearly defined that I can understand how the authors each on his side may have concluded that the alterations described by them were specific." The procedure of Van Gehuchten and Nélis is, however, more simple and rapid than the method of Babès, and on this account is to be preferred.

The method of procedure recommended by Van Gehuchten and Nélis is as follows: The ganglion is put at once into absolute alcohol, in which it is left for twelve hours, the alcohol being changed once. It is then transferred for one hour to a mixture of absolute alcohol and chloroform; next put for one hour in pure chloroform; then for one hour in a mixture of chloroform and paraffin, and lastly in pure paraffin for one hour. The sections are put in the oven for a few minutes, then passed through xylol, absolute alcohol and 90 per cent. alcohol, after which they are stained for five minutes in methylene blue, according to Nissl's formula, differentiated in 90 per cent. alcohol, dehydrated in absolute alcohol, and cleared in essence of cajuput and xylol. If frozen sections are cut, they are put for a few minutes in 90 per cent. or 94 per cent. alcohol.

Realising the great importance of the discovery of Van Gehuchten and Nélis, in conjunction with Dr. D. J. McCarthy, of the William Pepper Laboratory of Clinical Medicine, I undertook in last May a series of experiments to determine its applicability to the examination of the animals suspected of rabies which are frequently sent to the laboratory of the State Live Stock Sanitary Board for diagnosis. In our work we have generally used 10 per cent. formalin for fixing our tissues. They are then transferred to 95 per cent. alcohol, and finally to absolute alcohol. For the most part the tissues have been cut without imbedding, being attached to blocks by the aid of mucilage of gum arabic, though in some cases celloidin has been used. The whole process can be completed in six hours. For the bringing out of the chromatolytic changes the Nissl method has proved the best, but the capsular changes were best brought out in sections stained by hematoxylin and eosin. Since these latter changes are the most essential diagnostic features in the sections, we would suggest that material unfit for the Nissl method will still show the capsular changes when stained by hematoxylin or hemalum and eosin.

Up to the present time we have examined twenty-eight cases of rabies, including eleven dogs suffering with street rabies, one cow, one horse and fifteen rabbits, which were inoculated from these animals, a few being of the second generation, *i.e.*, inoculated from the first experimental animal. In all of the cases studied (28), except that of the horse, suspected of rabies, we obtained positive results in the plexiform ganglia. In one case, however, the changes were slight, and more marked in the peripheral (distal) portion of the ganglion. In twenty-one cases the bulb was examined for the rabic tubercle of Babès. Positive results were obtained in nineteen, though in two cases only chromatolysis, without distinct tubercle formation, was present. It will be seen that in two cases the rabic tubercle of Babès was not found, while the lesions described by Van Gehuchten and Nélis were present, though in one of these the changes in the ganglion were so slight as to leave us in some doubt. In this case, however, the subdural inoculation of rabbits gave positive results, and the microscopic examination of these rabbits showed the bulbar lesions of Babès as well as those of Van Gehuchten and Nélis in the ganglia. In the two cases mentioned in which the bulb showed only chromatolysis without distinct tubercle formation, the lesions in the ganglia were marked. One of these was the cow, which had shown clinical symptoms leading the veterinarian in attendance to suspect rabies. Two rabbits inoculated subdurally with the brain of this cow both died with typical signs of rabies, and by microscopic examination both the rabic tubercle of Babès and the lesions of Van Gehuchten and Nélis were found. These results led us to believe that the changes in the intervertebral ganglia are more constant than those in the bulb.

Of the rabbits examined three had been inoculated with virus of the second generation from dogs having street rabies. One of these rabbits showed symptoms of the disease on the eleventh day after inoculation, the shortest time which elapsed in any of our cases between inoculation and the appearance of rabiform symptoms. The microscopic examination of these rabbits gave positive results.

Of the dogs examined six had shown unmistakable clinical signs of rabies, while five were only strongly suspected of the disease. All the cases were controlled by the inoculation of rabbits, except two dogs, in which the clinical symptoms left no doubt as to the diagnosis.

Our work has led us also to the study of a number of control cases which are as yet incomplete. So far as we have gone, however, they induce us to believe that the lesions described by Van Gehuchten and Nélis may, for all practical purposes, be regarded as specific of rabies. We bear in mind the opinion of Van Gehuchten himself, and held also by some other observers, that in dogs at least the changes in the cerebro-spinal and sympathetic ganglia are only specific of the natural or street rabies. The lesions produced by the experimental inoculation of the "fixed" virus are not as marked as those in natural cases, and at times may be completely absent. We have not experimented with a fixed virus, but in rabbits inoculated with street virus of the first and second generations the gangliar changes have been marked. We have been convinced that the discovery of Van Gehuchten and Nélis is of great importance from a scientific as well as a humanitarian standpoint. It can be rapidly and easily carried out, and should be a matter of routine in the examination of suspected cases of rabies in every laboratory.

In the examination of the medulla several sections were taken at random for mounting, but serial sections, extensive investigations of different portions of the bulb were not made, inasmuch as we were investigating rapid methods of diagnosis only, and not the essential nature nor the presence of these tubercles in the central nervous system. It is with this understanding that we recommend the examination of the ganglia rather than the bulb.

The attention which the subject has attracted, and the large number of investigations which are being made in consequence, will probably lead to the discovery of isolated cases here and there, in which lesions closely resembling, or perhaps identical with, those under discussion will be found. So far only four of such cases have been reported, all in man. While these are sufficient to make us doubt the absolute specificity of the lesion, it can be said with certainty that neither in man nor in any of the lower animals is there any condition known in which these changes appear constantly, except rabies. Their occurrence in this disease is so constant and so marked that we cannot but believe that they have great diagnostic value.

We have as yet failed to find a case in which these changes were present that did not prove to be rabies on inoculation. On the other hand, though we have examined the ganglia of a number of animals, some of which showed a progressive paralysis not unlike that seen in rabies, we have never seen any changes which could be mistaken for these. In a recent publication Hebrant makes a similar statement, mentioning as diseases in which he has made the examination, distemper, cerebellar paralysis, encephlo-myelitis and lead poisoning, all in dogs.

Beyond the diagnostic value of this discovery we feel that it has another and scarcely less important bearing, in that we can say to those who have questioned the reality of this disease as a distinct pathological entity, that there is now an easily demonstrable lesion distinctive of rabies. With this step accomplished, we can expect further advances in the immediate future, and hope that it will not be long before coroners will admit the diagnosis to their records without hesitation, and that health officers will be given full power to impose such regulations as are necessary for the suppression—and let us trust—the eradication of this fearful disease.

It must be remembered when employing this rapid method of diagnosis that while the presence of the changes described in the ganglia enables us to say with great certainty that the animal furnishing them was rabid, the absence of them does not permit us to exclude positively this diagnosis. To obtain the surest results the animal must not be destroyed, but allowed to die. Owing to the quick death which is the rule in rabies this does not entail much loss of time in beginning treatment.

From our study of this subject the following conclusions seem justified:

1. When present, the capsular and cellular changes in the intervertebral ganglia, taken in connection with the clinical manifestations, afford a rapid and trustworthy means of diagnosis of rabies.

2. That when these changes are not present it does not necessarily imply that rabies is not present. The lesions afford contributory evidence more or less valuable, depending on the duration of the clinical manifestations.

3. That in certain cases when the capsular changes are slight, such as in animals dying or killed in the early stages of the disease, the changes are more marked in the distal-peripheral end of the ganglion.

4. That the rabic tubercle of Babès is present sufficiently often to furnish valuable assistance in cases where only the central nervous system is obtainable without any of the ganglia, but in cases where the ganglia can be had they offer a simpler and easier method of diagnosis than do the brain or cord themselves.—*From the Laboratory of the State Live Stock Sanitary Board.*

NOTE UPON THE RABIES EPIDEMIC IN ROCHESTER, WITH A REPORT OF A VERIFIED DEATH FROM HYDROPHOBIA.[1]

By GEORGE W. GOLER, M. D.,
Health Officer, Rochester, N. Y.

ABOUT June 1, 1900, we began to receive reports of dogs dying of a strange disease, which had not before come under the observation of most of the veterinarians. The symptoms in these animals were briefly, change in temperament, loss of appetite, posterior paralysis, mouth drop, convulsions and death. An investigation was begun in each of these cases by inoculating portions of the medulla beneath the dura of rabbits, which almost uniformily produced death represented as characteristic of paralytic rabies in from two to eight weeks. After a number of these examinations had been made, and after the observation of a number of cases of dogs dying with typical symptoms of furious rabies, it was unhesitatingly announced by the health department that there was an epidemic of disease in dogs, which upon examination verified by the highest authorities in the country, was determined to be rabies.

The announcement on the part of the health department was received, as such announcements usually are, with jeers, and thenceforth more than six months was required to enlighten the public so that the necessary precautions might be taken to prevent the extension of the disease. From the beginning of cold weather, or about

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[1] Read before the Pathological Society of Rochester, January 17, 1901.

November 1st, up to the 1st of April, an average of more than a dog a day has been reported as rabid; a great many persons have been bitten, from fifteen to twenty people have been sent to the Pasteur Institute at New York City for preventive inoculation, and two persons have died of the disease. Letting the unverified case of the disease pass, I wish briefly to report the following case:

On or about December 15th, a "cur collie" ran amuck in the western part of the town, biting six people in this city and adjoining towns. The dog was secured after a chase, the jugular ganglion removed, submitted to the rapid test, and the persons bitten recommended to go to the Pasteur Institute of New York for preventive treatment. Three or more of the bitten persons went, but one of them, L. C., aged 46, refused to go. He complained of pain in the bite, and lightning pains extending up the arm from the seat of the bite upon the hand. On January 3d, rabbits inoculated from this animal died of paralytic rabies, and Cook was again invited to take preventive treatment. On or about February 9th, he began to have maniacal seizures which were attributed to alcoholism for the man had always been a drinker, and since his bite had been drinking heavily. In these seizures he jumped from his bed, rushed out doors and back again, got down on the floor and tore at the carpet, most of the time making strange guttural noises. He could drink but a teaspoonful of water at a time, and even this small quantity of fluid was always followed by a convulsive seizure. His temperature was 101°; pulse, 120, respiration rapid and labored; he presented all the evidences of mental distress, and died in one of many convulsive seizures on February 11th.

A post mortem examination revealed the characteristic "wet brain" of an alcoholic, there was an old tubercular deposit in both lungs, and the kidneys presented evidences of an interstitial nephritis. The jugular ganglion and a portion of the medulla were removed. The ganglion prepared after the method of Van Gehuchten and Nélis, which Ravenel has elaborated, showed the most beautiful characteristic changes of rabies, as found in the jugular ganglion by this method. Portions of the medulla inoculated into rabbits produced death with characteristic paralytic rabies in sixteen days. Portions of the medulla were sent to Dr. D. E. Salmon, Bureau of Animal Industry at Washington; Dr. V. A. Moore, of Cornell University, and Dr. M. P. Ravenel, of the University of Pennsylvania. Animals inoculated from Cook's medulla by these gentlemen produced characteristic paralytic rabies in each case. In some of the cases the experimental work was carried into the second and third generations. In Dr. Ravenel's work, he also found the characteristic rabid lesion in the ganglion, taken from one of the rabbits inoculated from Cook's brain.

Here, then, is presented a case in which a dog with the clinical symptoms of rabies is known to have bitten a man; the dog is proven to have rabies, both by the rapid test and by the inoculation of animals. The man dies on or about the forty-sixth day after the bite with the clinical symptoms of hydrophobia, his body is submitted to a post mortem examination, in his jugular ganglion are found those changes characteristic of rabies, his medulla is examined and there is found the rabic tubercle of Babès. Four different observers inoculated animals from his medulla, and all secure like results, these experiments being carried by at least one of the observers into the second or third generation. In at least one of the cases the characteristic changes are found in the ganglion of one or more of the rabbits. Could there be stronger clinical and scientific evidences of the death of this man from hydrophobia?

TOXEMIA OF PREGNANCY.[1]

By MONTGOMERY A. CROCKETT, M. D., Buffalo, N. Y.,
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THE toxemia of pregnancy has its origin, not in disease, but in the conditions of the gravid state itself; it is an autointoxication resulting from the insufficient elimination or modification of the products of tissue metabolism. This theory of autointoxication was advanced by Bouchard in 1887, and since his time there have been very many investigations to discover the exact nature of the poisons responsible for the affection. Yet to-day, after fourteen years, one rises from the study of the literature of the subject with a feeling of dissatisfaction which is not allayed until one appreciates the limitations of physiologic knowledge.

We know that the body is a vast laboratory and that the metabolic processes continually are producing a quantity and variety of chemical compounds which, after passing through various metamorphoses, are eliminated through the intestines, skin, kidneys, lungs and liver. Like those whose business is the manufacture of high explosives, we become accustomed to the constant presence of the dangerous compounds until, now and then, an accident happens which awakens us to the dangers of the situation. How much of the chemistry of digestion and nutrition still remains unknown to us!

In a recent article (McClure's Magazine, February, 1901,) Professor Remsen of Johns Hopkins University refers to the "awesome proteids" and expresses the opinion that they will remain unsolved problems for generations to come; he also says, "yet everyone who knows about chemistry and physiology knows that these proteids must be understood before we can hope to have a clear conception of the chemical processes of the body." In the American Text-book of Physiology, Professor Lusk mentions over twenty principal products of the digestion and putrefaction of proteids and says that their consideration from a chemical standpoint is impossible, for their composition is not known. Have we the right, then, to expect definite statements about autointoxication when one of the chief constituents of the body still remains a mystery?

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[1] Read before the section on obstetrics, Buffalo Academy of Medicine, February 26, 1901.

Then there are the ductless glands about whose internal secretion so little is known beyond the fact that in some way they have an important rôle in the functions of metabolism.

In the intestines a certain amount of bacterial decomposition, especially of carbohydrates, is normal. Where is the boundary line between normal and pathologic bacterial action? Diminished action of the digestive enzymes, deficient absorption from the bowel and a large quantity of proteid material will permit the bacterial decomposition to become so great that products arise which, in some unknown way, disturb even the most distant organs.

The vital processes in the cells themselves are entirely beyond our ken. We note the most wonderful transformations, such as the changing to serum albumin of the peptones and proteoses, substances poisonous to the general economy if directly injected into the circulation. How the cells perform the metamorphoses, what conditions alter their activities and what may be the products of their disordered functions are subjects about which little is known.

Finally, back of all the metabolic processes stands an intricate nervous system, a governing power whose constitution and by-laws not yet have been wholly deciphered. With these chasms in our physiologic knowledge no wonder a discussion of autointoxication brings to light views both indefinite and conflicting. If the mechanism and capability of the human laboratory are so little understood naturally the nature of the output is difficult to determine and, for the present, we must content ourselves with general statements. At all events we know, from observations upon ourselves and animals, that the products of tissue waste, when accumulated within the organism, may produce grave disturbances.

Even a superficial study of the physiology of elimination suggests two ways by which autointoxication may be brought about. First, there may be some impairment in the transforming functions, so that the waste matter is not converted into a chemical composition appropriate to the structure of the eliminative organs; thus intermediate, but normal, products accumulate, and we have toxic symptoms caused by substances which, strictly speaking, are not poisons. Second, through functional insufficiency the exit by way of the excretory organs may be closed and again intoxication from normal products is the result. It must, however, be borne in mind that a disarrangment of metabolism by either of these two ways soon produces alterations of organic function, so that distinctly toxic compounds may appear. Viewing the subject of the toxemia of pregnancy in the light of the above statements we must pass to the consideration of the kidneys, liver and bowels; we omit the skin and lungs because these organs seldom play a primary part in the production of the autointoxication of gravid women.

The kidneys.—Eclampsia undoubtedly is an affection of toxic origin and the earlier writers looked to the kidneys as the chief seat of the difficulty. It is well established that in pregnancy the toxicity of the urine is much increased over that passed by the non-gravid woman, and the presence of toxic symptoms is associated with a diminution in the amount of material eliminated by the renal functions. Every physician is familiar with instances of autointoxication caused by renal insufficiency, although the underlying conditions leading to the lessened excretion may have been obscure. Normal urine is a very complex product and our routine clinical examinations are apt to make us forget that it contains many substances for which we seldom or never test. The kidneys eliminate not only the normal end-products of metabolism but also substances occurring in food, but which are not classed as food products. (American Text-Book of Physiology, p. 274, first ed.) The important points to remember are that the symptoms associated with deficient renal action are due to the retention of not one, but many compounds, and that the fault of their non-elimination may not lie with the kidneys.

Liver.—This is one of the great transforming organs; it stands between the portal and systemic circulations, protecting the organism from a dangerous accumulation of ammonia compounds by converting them into urea, the bile carries off certain waste substances and in the liver the dextrose is side-tracked as glycogen. Evidently a marked interference with hepatic functions may overwhelm the economy with the precursors of urea. Pinard looks upon the autointoxication of pregnancy as a hepato-toxemia and Bouffe de Sanite

Blaise (Med. Review of Reviews, June, 1899,) mentions the following diagnostic features as indicating deficient hapatic action; progressive decrease in the quantity of urea with increase in the proportion of uric acid and such products of retrograde metamorphosis as leucin and tyrosin; alimentary glycosuria, *i. e.*, if the woman ingests a fixed amount of glucose a portion of it will appear in the urine owing to the impairment of the glycogenic function; there is urobilinuria and the toxicity of the blood-serum is increased.

Bowels.—We all are so familiar with instances of toxemia arising from absorption of the products of intestinal dyspepsia and putrefaction, that we need say but little on this part of the subject, except to state that autointoxication from the bowels is one of the great dangers of pregnancy.

Although it is an easy matter thus to divide the subject of toxemia, we soon find that a complication is introduced by the fact that the poisonous products coming from one organ derange another, so that the intoxication becomes cumulative. Such intermediate compounds as uric acid may produce insufficiency of renal action; the intestinal toxins may embarrass the liver and irritate the kidneys. In many cases of toxemia the processes become so involved that the sequence of events is obscured and we must content ourselves with Bouchard's indefinite summing up, that autointoxication is a complex intoxication, resulting from deranged metabolism. On the whole, there is no good reason for assuming that the autointoxication of pregnancy differs in its chemistry and mechanics from the toxemia met with under many other circumstances. We have next to consider the conditions of pregnancy predisposing towards autointoxication.

The demands for the protection and nourishment of the fetus stimulate the anabolic processes of the mother; more food is ingested and the products of digestion and nutrition are increased. During its growth, the fetus adds a larger and larger volume of its own waste to that already present in the maternal circulation. Ordinarily, the burden laid upon the transforming and eliminative organs brings about a physiologic hypertrophy and the woman is protected against harm, but just as there are some hearts which only functionate well as long as they are not exposed to unusual strain, so there are some excretory organs which fail to meet the demands of the hour and such is particularly the case with those women whose elimination is habitually deficient. The cessation of menstration undoubtedly deprives the patient of an important eliminative route. At the very time when excretion becomes so indispensable for the woman's welfare the growing uterine tumor increases intraäbdominal pressure and interferes with the functions of liver, kidneys and bowels. One reason why pregnancy may be regarded as a condition mid-way between health and disease is that it calls for greater elimination and at the same time hinders the process. Many experiments prove the increased toxicity of the blood of pregnancy and the toxicity is greater towards the latter months, both because the fetal excretion is larger and the intraäbdominal pressure greater. So well recognised is this tendency of pregnancy to develop autointoxication that the opinion is growing that almost all the so-called diseases of pregnancy should be regarded as symptoms of toxemia.

Toxemia and the Hyperemesis of Pregnancy.—A certain amount of nausea and vomiting is considered to be a part of the physiologic processes of pregnancy, but whenever the gastric disturbances are so severe as to interfere with the welfare of mother or child they can be classed as pathologic. There are no hard and fast lines between simple and pernicious vomiting, the one fades into the other and many of the modern authors are reaching the conclusion that both forms are abnormal phenomena, depending upon the same general causes. All cases of digestive disturbance in pregnancy demand the attention of the physician as he cannot know but that the mildest symptoms may be the precursors of hyperemesis. There are two important elements in the vomiting of pregnancy, one the reflex stimulus and the other the over-susceptible nervous system. Simple vomiting may be but the result of the action of a pregnant uterus upon a nervous system, which has not yet adjusted itself to the gravid state, but irritability of the nerve centers is one of the prominent signs of toxemia and, at least, in severe forms of vomiting, autointoxication is rarely absent. In fact, morning sickness may be one of the factors producing the toxemia. If there be abnormal pelvic conditions, as displacement or inflammation, the reflex stimulation will be all the greater. Intelligent treatment should direct itself both to the general and local conditions. From my own limited experience, I am satisfied that the gastric disturbances of pregnancy are neither frequent nor severe when the patient's elimination is kept up to the standard. It must also be remembered that the toxic elements themselves are sources of irritation and that the vomiting and diarrhea may be efforts at excretion. The long list of therapeutic failures contained in the older text books on obstetrics bears witness to non-appreciation of the relation between toxemia and pernicious vomiting.

Toxemia and Eclampsia.—The weight of evidence today is in favor of the toxic etiology for eclampsia. There have been attempts to fasten a microbe upon this affection, but without much success. When we recollect that toxemia is a favorable condition for infection the suspicion arises that the presence of bacteria is a result and not a cause. The symptoms of headache, mental irritability, tinnitus, etc., which constitute what is known as the pre-eclamptic stage, are the typical symptoms of toxemia and it is a striking fact that eclampsia is rare among those patients whose excretion is sufficient.

Neuralgia, ptyalism, insomnia, herpes zoster, sweating, pruritus and melancholia are other disorders of pregnancy which may be caused by toxemia and which I will dismiss without comment.

If these views regarding the relation between autointoxication and gestation be but partially true, the importance of urinalysis during pregnancy cannot be overestimated. A sample from the twenty-four hour urine should be examined every two weeks; oftener when there are least indications of disturbance. The patient herself should be directed to note striking variations in the amount of urine passed. Many patients do not appreciate the importance of using a strictly clean bottle; a few days ago I received urine showing a specific gravity of 1040 and the presence of sugar. The glycosuria was cured by prescribing a clean bottle in place of the one formerly containing Mellin's food. A great many pregnant women are troubled with leucorrhea, enough to contaminate the urine and give a test for albumin; therefore it is well to direct the patient to take a vaginal douche and introduce a tampon of absorbent cotton just before urinating; a string tied to the tampon makes removal easy. The estimation of the percentage of urea is the most important part of the urinalysis, not that the urea is a serious poison, but the degree of its elimination is a valuable index of renal excretion. In the urine of pregnancy the urea varies from 1.4 to 2 per cent. (E. P. Davis); less than 1 per cent. indicates danger.

Albumin is present in 5 per cent. of all cases of pregnancy, and in a large proportion of the patients does not appear until the latter months of gestation. Allbutt does not believe in pressure as a cause of albuminuria on the ground that the renal veins are not easily pressed upon and that albuminuria often is absent when the pressure is greatest; he thinks that the poisons absorbed from the intestinal tract are responsible for the kidney disturbance. Under all circumstances albuminuria calls for treatment as there has been established a definite relation between this condition and lessened development of the fetus; albuminuria frequently is associated with hemorrhages into the placenta, which may be extensive enough to destroy the fetus. It is likely that the toxins are the underlying causes of both the renal disturbance and the injury to the child. Jewett (*Brooklyn Medical Journal*, August, 1899,) says that albumin is present in between 80 and 90 per cent. of eclamptic patients previous to the first convulsion and that eclampsia is rare when the daily amount of urine is three pints. He also states that a large amount of urine, say 70 ounces in twenty-four hours, will eliminate the poisons even when the tests show albuminuria and diminished urea. The bearing of these facts upon the importance of measuring and fully examining the urine of pregnant women is obvious. It is unfortunate that we have no clinical test by which we can estimate the toxicity of the urine, for a marked diminution in toxicity would be a valuable warning of approaching danger.

The treatment of toxemia is based upon ordinary common sense. The manufacture of the poisons is lessened by restricting the diet; in bad cases limiting it to milk; in some instances we must strike at the source of all the evil and empty the uterus. Elimination is promoted by stimulating the excretory powers of the bowels, skin and kidneys. The great value of normal salt solution in all cases of toxemia should not be passed over without mention; in mild forms of autointoxication the solution may be introduced per rectum; in severe, hypodermoclysis should be employed Salt solution has given very favorable results in eclampsia, in which affection it is most effective when used intravenously, preceded by bleeding in appropriate cases. The saline infusion not only dilutes the poisons but promotes diuresis; even a few ounces of salt solution may cause a copious flow of urine.

In conclusion, we wish to state that the theory of autointoxication as applied to pregnancy has led to a much more intelligent understanding of the disorders of pregnancy, and that the physician who acts on this theory will not only make his patient more comfortable, but protect her from serious danger. If the pregnant woman would place herself under the care of an able physician from the very beginning of gestation, and if the medical attendant performed his whole duty, the socalled diseases of pregnancy would show a marked diminution in frequency. It is true, we know little about the toxic products themselves, but we understand enough of the general processes of metabolism to appreciate how the poisons may arise, to recognize the symptoms which they produce and to work in harmony with nature for their removal.

A BRIEF RESUME OF THE GROSSER ANIMAL NATURE AND ITS APPLICATION IN MEDICINE.[1]

By G. N. JACK, M. D., Depew, N. Y.

(Concluded from April number.)

ANOTHER, and one of the most fruitful sources for the parasitic growth of quacks, and in fact the weakest point in our profession today, lies in the changeable, unstable and unsettled condition of our etiology and treatment.

The etiology and treatment of disease is the part of our science that most directly concerns the layman, and leaves us open for attack.

If the etiology and treatment of disease could be brought down to bare undisguised nature, like our embryology, anatomy, physiology, pathology and chemistry are today, the physician would stand high in the community, and proudly feel that he possessed a superior knowledge which gave him peculiar rights that no one could infringe upon.

We have but very little positive knowledge as to the etiology of disease. Many theories have been advanced, but theories prove nothing. Theories that are advanced today and contradicted tomorrow produce uncertainty, and uncertainty breeds contempt.

The layman, through our newspapers, ever eagerly post themselves on the numerous contradictory, conflicting and disappointing theories that are continually being advanced, thus encouraging them to believe that the medical fraternity are possessed of no real, actual, well-established and practical knowledge. To allow such a spirit to exist among the laymen is dangerous, for it often creates in them a feeling of distrust, or still worse, gives them the erroneous opinion that the regular practitioner is no better than the willfully, lying, deceiving, advertising quack.

Has our present popular germ theory of disease come to stay, or is it like theories of the past, doomed sooner or later to gradually sink into oblivion? I will not attempt to answer that question in this paper, but I will simply give you a few thoughts for consideration.

The germ theory of disease has no attraction for a close observer of nature and nature's phenomena, for every phenomenon that this theory attempts to explain, can be proven by chemical facts. No one can dispute, however, but that the germ theory has been a great boom to the animal kingdom, for with it came cleanliness, and cleanliness will wash away precipitate and destroy a chemical poison as well as an imaginary germ. If we consider this disease producing factor as a chemic rather than a germic substance, it so gracefully and securely glides into the machinery of nature as to defy all authority or further speculation to the contrary. All life, growth, and in fact nature itself, is a bi-product and a continuation of chemical reactions and equasions.

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[1] Read at the annual meeting of the Medical Society of the County of Erie, January 8th, and at the Central Medical Association, Lancaster, N. Y., February 4, 1901.

It is conceded by all that healthy, normal animal or vegetable life is a result of and directly dependent upon a fixed, definite, positive and accurate set of chemical reactions that admit of slight variations as to age, surroundings and habits. It follows, then, as a natural and indisputable law that all diseases, with their various degrees and manifestations, must be due to an abnormal biochemy.

Nature offers numerous illustrations of this law, one of which is the changes life undergoes under different temperatures and atmospheres. For instance, in a torrid temperature, under a bright sun and a clear atmosphere, we meet with chemical changes producing sunstroke. In the same temperature, with a damp, cloudy, humid atmosphere, combined with the influence of rapidly decomposing animal and vegetable matter, we meet with a different chemical change, resulting in a disintegration of the blood, characterised as all chemcal actions are, by, first, an abstraction of heat or chill, and, second, by a precipitation, increased heat, or fever. These chemical actions we see most strikingly demonstrated in malarial fever.

Now, if we pass to the temperate region, with a chilly, damp, cloudy, humid atmosphere, we meet with a different set of biochemical changes which acts more on the chemistry of digestion than on that of the blood, producing that condition known clinically as "la grippe."

By passing on to the frigid regions, we again meet with still another abnormal biochemical process, manifesting itself clinically, first, by a tingling, prickling sensation; second, by a chill; third, by numbness; fourth, by drowsiness, and fifth by death. If this process be stopped at the chill it may be followed by a healthy reaction and do no harm, but it not infrequently combined with the irritating effect of the inhaled cold air upon the respiratory apparatus, results according to the susceptibility of the individual into either a coryza and a bronchitis or a pneumonia. If an illy protected portion of the body, as a toe or a finger, be frozen sufficiently to produce death of that member, it will, if amputated soon, do no further harm, but if this frozen member be left and allowed to decompose *in situ*, by so doing a cadaveric alkaloid will be formed that may by absorption, produce a progressive inflammation and necrosis, to continue until the entire vitality of the body is exhausted.

The germ theory of disease could be bunglingly crowded into these arguments, but the most careless student of nature can hardly fail to see how simple uncomplicated and substantial, our knowledge of disease would become by the exclusion of the germ idea.

If an overdose of the chemical poison known as strychnine be injected into the circulation, it produces a characteristic set of muscular spasms and death, and so if the chemical poison generated from a rusty nail in the horse stable be introduced into the circulation, it produces nearly the same muscular contractions and death in tetanus. This thought can be applied to all of our supposed germic inoculations, the toxins and antitoxins of today.

In order to prove that mildew, mold, fermentations, putrefactions, or slow decomposition are of germic origin, it will be necessary to prove also that fire, or rapid decomposition, together with all our different chemical reactions are of the same origin, for they are all governed by the same law, belong to the same class, and ultimately produce the same results. The only difference is that one group has a slow, the other a rapid process.

Life in life, which is the fundamental principle of the germ theory, is not in its actual, visible forms, very, if at all, injurious to health. In fact nature has made provision for life to exist in life; thus we find the fetus normally growing and developing for nine months in utero, and during five months of this time it is an active, kicking, squirming urchin, without injuring, but usually actually benefiting the health of the mother. Nature does not stop here even, but provides for another twelve months parasitic life for the infant upon the breast of the mother.

A most convincing, if not positive proof, of the incorrectness of the germ theory, lies in the fact that all the numerous parasites, whether antecious, heterecious, accidental, andophytic or epiphytic will feed and thrive on, or in living animals without in many instances doing any harm to the health of their host, and when they do harm it is always of a mechanical and never of a toxic nature.

Thus we find the filaria sanguinis hominis doing harm by its actual presence, obstructing the lymph channels. The coenurus cerebralis produces staggers by actually burrowing into the brain and spinal marrow. The ankylostomum duodenale, produces anemia by robbing its host of food which it absorbs for its own sustenance, and also by reflexly causing dyspepsia.

Now, in consideration of the fact that animals may and often do harbor numerous parasites with comparatively little, if any detrimental results, it is certainly, to say the least, farfetched and not in accord with nature, to argue that an invisible imaginary germ will so greedily destroy life.

By excluding the germ theory our etiology and prophylaxis would be greatly simplified, and the unknown origin of many diseases determined. We then could speak of vaccination as introducing a chemical substance to produce a chemical change. Immunity in general could be reasoned out and demonstrated on a scientific basis, thus furnishing tangible material for the construction of an artificial immunity in all diseases, characterised by a permanent chemical change that protects against subsequent attacks as scarlet fever, measles and syphilis.

Our reason, then, for quarantineing would be to keep the unafflicted from coming in contact with a chemical poison that produces characteristic and deleterious results.

With all due regard for the earnestness, intelligence, well-meaning and high-standing of the originators and perpetuators of the germ theory of disease, yet, with nature as a judge, one cannot help but acknowledge a striking similarity between the aboriginal medicine man, whose function it was to drive away evil spirits from the afflicted, and the physicians of today who feel that it is their duty to protect their patients from invisible, hungry germs, that are ever hovering near, and impatiently awaiting an opportunity to devour them.

Our present treatment of disease, including both surgery and therapeutics, is also in a very unsettled and unsatisfactory condition, yet it has a redeeming feature in that there is a strong tendency to a just appreciation and recognition of nature and her laws. Physicians and surgeons themselves are usually conscious of nature's superiority over drugs, or the knife, in all cases where she can be utilised, yet they will, not infrequently, purposely deceive or sanction the self-deception of their patients, by prescribing and operating according to the delusive opinions and demands of the layman. Deception is dangerous, and those who attempt to profit by it will more than once feel the sting of the lash they unwittingly try to wield.

The medical fraternity often give drugs that they have no faith in, or use the knife for mental effect, and at the same time order a hygiene that they have confidence will and usually does cure their patient, thus giving the layman the idea that the sole function of the physician is either to disfigure or poison. That this spirit is prevalent among the laymen is alarmingly manifested by the increasing patronage of the numerous "no knife," "no drug cure" quacks of the day. The laymen are not, as the medical fraternity is apt to assume, all fools, but, on the contrary, they eagerly keep abreast of the times, and in every possible manner inform themselves on such vital questions as beauty or disfigurement, health or sickness, life or death.

With our excellent public educational advantages, and the excessively large number of physicians, many of whom are constantly and publicly disagreeing with each other, we are safe to assume that the laymen are reasonably accurate judges of the true and the false in medicine.

Essential progressive experimentation should ever be encouraged and boldly practised, but the surgeon who habitually dissects all those complaining of vague pains, to the extent of his ability and the patient's vitality, to conclude that his patient's organs are normal, but her mind hysterical; or he who unnecessarily suspends kidneys; removes appendices, ovaries or uteruses, is gradually committing a professional suicide. Surgeons should be exceedingly cautious in operating upon cases that could be permanently cured by an intelligent application of Nature's laws.

Park, from his extensive investigations of malignant growths will, in their case, soon settle the question between the knife and medicinal applications. Halstead, with his careful history of all cases, both before and after operating, will soon settle the question between the knife and nature. There is a great sufficiency of unquestionably beneficial surgery to occupy a reasonably large number of surgeons without manufacturing cases.

Last spring at the Johns Hopkins Hospital, I heard Osler advise, while holding a clinic over a case of moveable kidney, never to let a neurasthenic know that she has a movable kidney, for she will not rest until she reaches the surgeon, and many of these cases can be cured by a bandage with increased fat, and he jocundly added, "the lay papers take these subjects up, they are tired of appendicitis, the tail has wagged the dog long enough, they will now take up moveable kidney."

To come back to the medical side, we find numerous physicians who are continually endeavoring, and earnestly believing, that it is their duty to substitute drugs for nature, or, in other words, to do with drugs what nature and nature alone can do. Then, again, there are many physicians who think that they must give drugs to collect their fees, but utilise nature to produce the cure. This is a mistake, for it gives their patients an erroneous idea which, when discovered, drives them to the no-drug quack. There are enough drugs whose actions are positive and often proven, that when intelligently used as nature's assistant will save life, relieve suffering, and restore health, to never justify their deceptional use to cheat nature. There is no excuse for our carrying diamonds in our pockets and wearing stones of paste on our breasts. Most people will willingly pay for advice, but hesitatingly spend their money for drugs.

We find Osler boldly combating many diseases with no other weapon than a due regard and careful consideration for nature's laws. Thus he successfully treats two of our most dreaded diseases —consumption and typhoid fever—without, in many instances, the aid of a single drug. I have constructed a hygiene for the asthmatic that has proven to be very beneficial, in that, theretofore, hopelessly considered, no-use-of-doctoring-sort of a disease.

Advertising patent medicine liars, have taught the laymen to believe that the physician should possess a secret and a positive cure for each and every affliction. The physicians should ever endeavor to correct that dangerous opinion. Show them that as there is no secret to the tools or material that a carpenter uses in constructing houses, yet the most fool-hardy, would never dream of constructing one of our modern dwellings without the special knowledge, skill and training of a full-fledged carpenter. Let them know that, so it is with the physician, for while he possesses no secret remedies, nor practises any mysterious art, yet through his profound knowledge of histology, physiology, anatomy, pathology, chemistry and physical diagnosis, he is enabled to construct laws of life for each individual case, and to intelligently apply the common so-called household remedies, which together restore health, relieve suffering, and save life. Yet, none but those possessed of the knowledge of the physician, can ever hope to achieve the beneficial results with these agents that the physician himself can accomplish. Point out to them the fact that a certain amount of doctoring is natural and essential to the perfect development of all animal life, for the cat when sick will take its catnip; the horse will nibble the bitter cherry bark, the cow will eat the bitter burdock, and the like.

It is my custom, with the ordinary neurasthenic office patient, if after a thorough examination, I find that I can be substantiated in doing so, to state to her that I can cure her with or without the so-called drugs, but that I prefer to give a little medicine as a "starter" and to let nature do the rest. I then proceed to impress upon her the importance of the advice, I am about to impart, by informing her of the countless years of profound study and research that it has cost the medical fraternity, to be able to positively ascertain the things which are best suited to her case, and which, if scientifically applied, will cure her. I show her that the entire chemistry of the body must be changed, and that in order to perfect this change it will require approximately three months' diet, salt rubs, cold spinal douches, cold sponge baths, massage and exercise treatment. And in order that I may know what part of the treatment to occasionally change, and when best to do so, to bring it to a scientific and satisfactory issue, I advise her to call once in three days, during these three months, thus enabling me, in her presence, as the occasion demands, to analyze her urine, feces, blood, muscular tone and reflexes, which serves, first, to keep me scientifically in touch with the case; second, to indelibly impress upon my patient the importance of the analysis, and, third, it gives her confidence in the directions I give, which makes her faithful to their fulfillment.

Thus it is that as one engineer may run an engine into the shop as worthless, a more skilled engineer will often take the condemned engine, and without any material repairs, will by first shining the engine up to make it proud and gain its confidence, and, second, by knowing the proper quantity, quality and time for coaling; when to shake down; when to shovel out; when and what to oil; when and how to take on water; and how best to regulate the draft; thus admirably causing her to usefully run out the natural period of her existence.

Just so a careless and unscientific physician will often give up a case as hopeless, to be taken up by a careful and scientific physician who will, by gaining confidence, and scientifically knowing, when, what and how to feed; when and how to bathe; the kind of exercise or recreation needed; proper clothing; and a correction of all vicious habits; thus by using nature as a guide, nurse the case back to health, vigor and usefulness.

In conclusion, I would say, let us not deceive nor be deceived, but boldly take off our coats and undisguisedly meet nature face to face, thus showing our noble character, and causing, in the minds of the laymen, our superior knowledge to tower so high that the parasitic quack may never hope to shadow its brilliancy.

Society Proceedings.

BUFFALO ACADEMY OF MEDICINE.

REPORTED BY THOMAS F. DWYER, M. D., Secretary.

THE regular quarterly meeting of the Buffalo Academy of Medicine was held at the Academy rooms, Public Library Building, Tuesday, March 19, 1901. The meeting was called to order at 9 p. m. by the president, Dr. MARCEL HARTWIG.

The minutes of the last quarterly meeting, December 4, 1900, were read and approved.

The nomination of officers resulted as follows: For president, Charles G. Stockton; secretary, Francis W. McGuire; treasurer, Charles S. Jewett; trustees, Arthur W. Hurd, J. Henry Dowd, Matthew D. Mann.

The program of the evening, under the auspices of the section of pathology, consisted of the following: A report of recent investigations of cancer, by H. R. Gaylord; A case of organic epilepsy, clinical and pathological report, by Henry P. Frost.

Attendance, 53. Adjourned at 11 p.m.

Section on Pathology, February 19, 1901.

REPORTED BY F. W. McGUIRE, M. D., Secretary.

The regular meeting of the Pathological Section was held at the Academy rooms, Tuesday, February 19, 1901. Present, 18 Fellows. In the absence of Dr. EUGENE A. SMITH, Dr. BENJAMIN G. LONG was elected chairman.

The first essayist of the evening was Dr. CHARLES S. JEWETT who read a paper, entitled,

LEUKEMIA.

The doctor gave a brief review of the earlier work of Virchow, Craigie and Bennett, Vogel, Neumann and others, on leukemia, the various theories regarding the nature of this disease were discussed, and it was shown that the theory of Virchow and Neumann, in combination with the modern theory of infection offers the best explanation at present available. In leukemia the specific causative organism has not yet been demonstrated.

Two chief varieties of the disease are now recognized: (1) the myelogenous or splenic-myelogenous form, characterised chiefly by the enormous number of myelocytes found in the circulating blood, also by the presence of eosinophilic myelocytes and of atypical forms and an increase of mast cells and of eosinophiles and the presence of large numbers of nucleated red cells, a form that is always chronic; (2) the lymphatic form, in which is found a great, absolute and relative increase of the lymphocytes. In this form the nucleated red cells are present, but less numerous, and the anemia is usually far more pronounced. Lymphatic leukemia may be either acute or chronic.

The writer then reported three cases of leukemia which had come under his observation, giving in detail the results of the blood examinations.

One was a case of myelogenous leukemia, in a man of 36 years, the others were of the subacute lymphatic variety and both occurred in infants. In the two latter cases, owing to the failure to secure autopsies, it was difficult to differentiate leukemia from the severe secondary anemia of infancy, but the marked lymphemic condition of the blood combined with the absence of all demonstrable cause for a secondary anemia seemed to justify the diagnosis of leukemia.

DISCUSSION.

Dr. Irving P. Lyon was interested in the paper. He thought cases two and three were too young to make a positive diagnosis of leukemia, as the blood of children under one year show a marked leucytosis. He said Van Jaksch anemia pseudo-leukemia infantum was generally due to rickets or syphilis.

Dr. Charles G. Stockton asked the author to explain the connections between pseudo-leukemia and leukemia, as some cases in the beginning resembled each other.

Dr. A. L. Benedict said he would hesitate to make a diagnosis from the examination of the blood alone without a post mortem.

Dr. Charles S. Jewett said that he did not wish to press the issue that the diagnosis of cases two and three were correct, but after several careful examinations of the blood he thought that his diagnosis was the most reasonable.

The next paper was an extemporaneous discussion by Dr. Lyon on

THE DISTRIBUTION OF CANCER IN BUFFALO FOR THE TWENTY YEAR PERIOD, 1880–1899.

The doctor said the purpose of investigation was to ascertain whether the distribution of cancer mortality through the city corresponded with the distribution of population, or showed an irregular distribution with local foci, resembling the endemic foci of certain infectious diseases. The secondary purpose of investigation was to develop any facts whatever that might be of interest in relation to the parasitic theory of cancer.

The city mortality records were examined and all cases dying of malignant growth—carcinoma, sarcoma, epithelioma, malignant tumor and the like, were culled out, numbering 2,413; of these 2,413 cases, as the result of a careful examination of the death certificate, hospital records, city directory, etc., 114 cases were excluded as non-resident, leaving a total of 2,299 cases of malignant tumor accredited to the city. Of the 2,299 cases, the house address of 294 could not be ascertained. These 2,005 cases were plotted on the city map according to residence, a colored dot representing each case. The distribution of cases thus shown, was found to be notable in one respect, viz.: a marked concentration occurred in the German and Polish quarter of the city. The equally populous Italian quarter, centering in Canal Street, showed by contrast a conspicuous absence of any cancer concentration; no relation could be established between cancer distribution and any other condition. The concentration in the German and Polish district was the only noteworthy fact.

The map also indicated the houses that had been the seat of more than one case dying with cancer, the dots representing such cases being surrounded by a circle for each such house. There were 44 such "cancer houses," 41 showing 2 cases, and 3, 3 cases each, making a total of 91 cases in such houses. Thus 91 out of 2,005 cases, or 4.53 per cent., died in "cancer houses." Dr. Lyon did not care to affirm that this percentage was more than was to be expected, but was inclined to think so, considering the fact that the number of dwellings in the city was 37,290 in 1890, and is probably over 50,000 at present.

The death-rate from cancer in Buffalo showed a steady increase, rising from 32 to 53 per 100,000 of population from 1880 to 1899, and thus agreeing with the reports from all civilised countries.

The age distribution agreed with other well known statistics. The race distribution was most important, Germans and Poles constituting 42 per cent. of the cancer mortality of the city, though making only 20 per cent. of the population (U. S. Census, 1890).

This fact agreed with the map concentration in the German and Polish section of the city, previously mentioned. Those of native (U. S.) birth constituted only 29 per cent. of the cancer mortality, as aganist 65 per cent. of the population of the city. Those of foreign birth in general showed a cancer mortality out of proportion to their population, as the Germans and Poles constituted 57 per cent. of all the foreigners, and as they inhabit in general a certain section of the city, it is of interest why such a section shows a great cancer concentration as indicated by the map.

The distribution of cancer by organs involved in the different classes of population was most important. Cancer of the stomach occurred in 47 per cent. of all males and 25 per cent. of all females dying of cancer, or 34 per cent. of both sexes. For the Germans and Poles the corresponding figures were 52 per cent., 35 per cent. and 43 per cent., and for those born in the United States 37 per cent., 13 per cent. and 21 per cent.

It is thus seen that the proportion of cancer of the stomach and cancer of all organs is more than twice as great in the Germans and Poles as in those born in the United States. This fact seems of great importance in pointing to the diet as a probable factor in determining the frequence of location of cancer in the stomach. It seems hardly possible to explain the variation between the two classes of population otherwise. Accepting this explanation, then, how can the diet affect this result? The choice of two theories is open. (1) The diet may be supposed to infect the stomach with a cancer producing organism, which organism occurs on certain articles of diet more generally used by the Germans; or (2) it may be supposed that the German abuses his stomach by his food and drink and thus increases its liability to cancer according to the trauma theory or Cohnheim theory. Dr. Lyon was of the opinion that the evidence for the abuse of the German stomach by diet was largely lacking, to support this theory, and that the doubled frequence of attack of the German stomach, as compared with the American stomach was best explained in the theory of direct infection through the diet.

Behla's observations at Luckan, Germany, supported the parasitic theory and laid suspicion upon uncooked vegetables, as the carriers of infection. As is well known the Germans are great eaters of raw vegetables, salads, and the like.

At any rate, whatever the theory of explanation, the important fact remains that the German stomach is remarkably liable to invasion by cancer, a fact apparently not previously known.

Among other interesting facts brought out by Dr. Lyon was the ratio of male to female mortality from cancer for different classes of population, representing as 100 the female mortality; the male mortality for Germans and Poles was 93, for those born in the United States, 51. The Germans and Poles stood in a class apart from all other nationalities in showing a close approximation of female mortality for cancer by male mortality, a marked difference between male and female mortality being shown by all other races. This was apparently explained by the fact that cancer of the breast and uterus was relatively less frequent in the German and Poles than in other races, as indicated by the Buffalo statistics.

Summarising his work, Dr. Lyon said that the statistics of Buffalo, show that the Germans and Poles of the city are 4.81 more susceptible to cancer than those of native birth (U. S.) and that the Germans and Poles in Buffalo are 10.00 times more liable to cancer of the stomach than those born in the United States. The facts are startling and apparently are but explained on the parasitic theory of cancer.

DISCUSSION.

Dr. A. L. **Benedict** was very much impressed with the number of cases of cancer of stomach in the German population of Buffalo. He thought that the American born should be in the excess as they more frequently abuse their stomachs. He said he had cured a number of cases that had been diagnosticated by others as cancer.

Dr. H. R. **Hopkins** thought there was a source of error in the house theory of infection. He would like to know what kind of houses they were where cancer had occurred more than once. Whether these houses were cottages, double houses or flats? He thought that some of us would change our minds regarding the American abusing his stomach if we had noticed the character of the food ejected from some of the foreigners' stomachs. He thought that the Americans eat wholesome food as compared with the foreign classes.

Dr. **Grover W. Wende** said that at least half of the children attending the schools were of German parentage, and offered this circumstance for the author's consideration.

Dr. **Charles G. Stockton** congratulated the author on the statistics and amount of work he had undertaken. He thought it remarkable that in the German women there was only four cases in the upper tract, as the tongue and jaw, as compared with twenty-seven in the German male. He also said a number of the complaints of the American stomach was only functional and could not agree that the American abused his stomach more so than the German.

Dr. H. R. **Gaylord** was much interested in Dr. Lyon's work, and knew that the doctor was very careful in compiling his statistics. He said in Germany and London they had formed societies for the investigation of cancer and thought the United States should do the same. The fact that such a man as Metschnikoff who had not eaten raw vegetables for twenty years, believing that cancer was caused by organism on them, lent support to that theory. He also stated that statistics might give us the cause before direct examination would reveal it, and believes that something in the diet to be the cause of cancer.

Dr. **Sydney A. Dunham** thought that the continued irritation of the stomach in the Germans was probably the cause of so frequent cancer in that race.

Dr. B. G. **Long** said females live longer than males, as he had made investigations which supported that theory and thought that that fact could account for the greater number of cancer in females. He thought the American stomach was not so much abused as the German.

Section on Obstetrics and Gynecology, February 26, 1901.

Reported by WM. G. RING, M. D., Secretary.

The regular monthly meeting of this section was held on Tuesday evening, February 26, 1901, at 8.30 p.m Dr. A. J. **Colton**, presiding.

The minutes of the previous meeting were read and approved.

RUPTURE OF THE UTERUS.

Dr. P. W. **Van Peyma** reported a case of multiparous delivery; pains were feeble; head presented, later nothing presented. Dr. Schroeter was sent for also Dr. Saylin; patient pulseless; small parts of child was felt under skin; cervix dilated and child delivered; placenta was in abdomen. No cause for rupture of the uterus was discovered. Placenta was delivered through the rent. Woman was doing well, but finally died of peritonitis. Dr. Schroeter gave further details of the same case.

Dr. J. W. **Grosvenor** asked Dr. Schroeter, if it would not have been well to have opened the abdomen and repaired the rent in uterus. Dr. Schroeter thought not.

Dr. M. D. **Mann** said that statistics showed that best results followed operation as contrasted with drainage.

Dr. **Ludwig Schroeter** said that the statistics he had looked up gave the reverse results.

Dr. **P. W. Van Peyma** said the cases he had seen—two or three—had been operated on and all died. One case without operation recovered. Dr. Carl Braun, of Vienna, advocated no operation. Operation or not, mortality is very great.

Dr. **M. A. Crockett** read a paper, entitled,

THE TOXEMIAS OF PREGNANCY. (See p. 736.)

Dr. **P. W. Van Peyma** followed by the reading of a paper on

SYMPHYSIOTOMY.

DISCUSSION.

Dr. **M. D. Mann**—Dr. Crockett has gone over the subject so carefully that it leaves little to add. I think the subject a most important one. Although we do not know what poisons are present, we can know how to get rid of them. I recall one case of nausea and vomiting, with frightful headache; she was obliged to take morphine—two or three grains at a dose—vomiting was continuous. We tried to get kidneys to excrete; the skin was dry and harsh. Emptied the uterus and finally the kidneys worked. Patient was sent to the country; she had headache and was given morphine, following which she had the entire train of symptoms repeated; it was with the greatest difficulty we saved her. I must say that the plan of discussing two papers at once is a poor plan and hope it will be changed.

In regard to Dr. Van Peyma's paper would say that the operation of symphysiotomy has never been done in Buffalo. He had never even seen the operation. It has a field in obstetric practice, though limited. Many cases reported of extra mobility of pelvis. Dr. Ayers urges wiring the bones. If bones were wired with silver wire the bad after-effects would be obviated. Four successful cases are reported. Statistics of Cesarean section show marvelous success; it comes as a distinct rival of the operation under discussion.

Dr. **Ludwig Schroeter.**—The subject of Dr. Crockett's paper is new. One of the points in the paper in reference to the liver is true.

With 12 per cent. mortality, we cannot expect the operation of symphysiotomy will become popular. If patient is saved by Cesarean section, she is saved in perfect health. After symphysiotomy they complain of backache and inability to bend down.

Prof. Fritsch says he never makes a symphysiotomy dependent upon the measurement of the conjugate diameter of the pelvis. If we follow Prenaud's advice we should abandon forceps altogether.

Dr. J. W. GROSVENOR.—The use of salt solution is very effective in deficient elimination. I recall a case in which the patient was given one gallon by mouth in twenty-four hours; it was effective in warding off eclampsia. I recommend the hot air bath.

Dr. GEO. N. JACK.—I was greatly interested in Dr. Crockett's paper. I think when physicians study bio-chemistry, tissue metabolism, and similar processes, they will use less drugs. I think symphysiotomy is the coming operation. Kelly reports thirty successful cases.

Dr. S. Y. HOWELL.—The importance of toxemia during pregnancy cannot be overestimated. We should study our patient during that time. A careful study of the twenty-four hours urine, and of the total solids should be made. Careful attention should be paid to the skin, as it is the great safety-valve of the kidneys. The condition of the bowels is of the utmost importance.

Dr. EDWARD L. FROST asked what proportion of the albumin found in urine came from the bladder, and cited a case; he also asked if the autointoxication was the result of pregnancy.

Dr. McCLELLAN POMEROY complimented the essayists, and stated that the whole subject of toxemia was indefinite at the present time, and it was difficult to say what would be the final outcome of its study. He saw one case of symphysiotomy in Montreal, Can. He did not believe the operation would become general. The doctor also recommended the single discussion of papers.

Dr. P. W. VAN PEYMA, in closing, said that he was much interested in the subject of eclampsia. He felt now, as formerly, that it is a fine field for investigation. Nausea and vomiting as a premonitory symptom is a very good suggestion, although it is not so in my experience.

Dr. M. A. CROCKETT, in closing, said that Dr. Frost drew correct conclusions; the autoinfection is the result of pregnancy.

Dr VAN PEYMA added that union after symphysiotomy, made by suture, was open to the objection that it was followed by necrosis of bone.

Dr. LUDWIG SCHROETER said that the mortality of symphysiotomy was 12 per cent; that is under all circumstances, but not so under favorable ones. Many groups of cases have been reported without a single death. It is true that women cannot do manual labor for a long time after the operation. As to Dr. Fritsch's suggestion, no one source of information can be depended upon.

Meeting adjourned at 11 p.m. Present, 25.

Section on Obstetrics and Gynecology, March 26, 1901.

REPORTED BY SYDNEY A. DUNHAM, M. D., Secretary pro tem.

The regular meeting of this section was held March 26, 1901, at 8.30 p.m. **ALBERT J. COLTON** in the chair.

The meeting opened with fourteen members present.

Dr. **STEPHEN Y. HOWELL** read a paper on

OVARIAN HERNIA.

Dr. **LAWRENCE G. HANLEY**, who was down for a second paper on the Relation of Pelvic Disease to Insanity, was unable to be present.

Dr. **STEPHEN Y. HOWELL** reported in his paper a case in which the ovary had invaded the right inguinal canal, on which he operated with recovery. Chief symptoms were pain, due to pressure and also sickening sensation. There was much inflammatory tissue around ovary. A truss had been previously worn. In reviewing the history of some cases, Dr. Howell believed the inguinal variety the most common.

DISCUSSION.

Dr. **MCCLELLAN POMEROY** said that Sajous gave the crural variety the most common, and womb displacement the chief cause.

Dr. **E. A. SMITH** had found various viscera in the hernial sac, *e. g.*, undescended testes and appendix.

Dr. **C. E. CONGDON** had found the ovary in the sac of a femoral hernia.

Meeting adjourned at 9.45 p.m.

Section on Medicine, March 12, 1901.

REPORTED BY JULIUS ULLMAN, M. D., Secretary.

Dr. **SIGMUND GOLDBERG**, chairman pro tem., presiding.

Dr. **JULIUS ULLMAN** read a paper on

THE RACIAL FACTOR IN HYSTERIA.

Dr. Ullman before discussing hysteria in the human species cited the reports of M. Aruch, who studied the disease in dogs, and of Hegier, who reported hysteria in a cat and a canary bird. In the genus man, hysteria has been confined to no one time, latitude or race. Though no direct reference is made to it in the Bible, in the light of our knowledge the miracles performed by the Nazarene must be interpreted as hysterical manifestations. The Greeks wrote entertainingly of it. The writer is of the opinion that racial characteristics are not so much the result of inherent qualities as of social conditions, and after classifying the physical and psychological causes he considered the social conditions which increase the disease relatively among various races.

Reference was made to the continued history of persecution among the Jews, their fertile mentality, the conditions of oppression, their exclusion from trades and professions, their isolation by segregation among themselves in ghettoes, their burdening with taxes and the tendencies this gave for consanguineous marriage and the learning to simulate hysteria the child from the mother.

Reference also was made to the increase of hysteria among the Latin and Slavic races, among the later of whom it can be attributed to conditions of surfdom but little better than slavery. Witchcraft and demoniacal possessions were spoken of as built in a ground work of hysteria and superstition, for as Fére says, the hysterical anesthesias hold first place as the marks of the devil. The Salem witchcraft in New England was spoken of, and it is not surprising to the writer that among the progenitors of the believers of witchcraft that other delusory belief of Christian science should have had its inception.

The history of the negro of Africa was mentioned. Their forcible kidnapping and horrifying voyage to this country in the slave trading ships gave sufficient reason for a psychical insult, the results of which may still be seen in the hysterical manifestations of the negro in this country, especially at religious revival meetings.

The history of the native American Indian among whom it was shown that hysteria could not have existed was given, and the effects of civilisation and assimilation on the increase of the disease among them was shown.

The Mongol and Hindoo races were alluded to, among whom it is seen relatively less frequent.

It was therefore shown that hysteria exists among all peoples and in all countries, and the fact that certain races, such as the Jewish, the Slavic, Latin, and possibly the negro are relatively more affected may be attributed to causes of environment rather than inherent qualities, for as Jacobs says, if all the Johns and Marias were to be shut up in ghettoes for a couple of centuries, they would undoubtedly show peculiarities in habit, and thought, and would develop a peculiar psychology. Heredity plays a rôle only in that a child may learn to imitate certain traits of an hysterical parent.

In conclusion, it was emphasised that hysterical symptoms may exist as epiphenomena and a background in organic diseases among susceptible races, or that though symptoms of hysteria are well marked the patient may at the same time have organic disease.

Better therapeutic results will therefore be obtained among those in whom hysteria is relatively more common by the administration of drugs, suggestion and mechanical treatment, directed aganist a latent hysterical condition in addition to treatment for the organic disease, if it be present.

Dr. **Geo. F. Cott** read a short paper upon the subject,

HYSTERICAL APHONIA.

He went into the pathology as far as known, and giving the different theories so far advanced as to its causation. He pointed out the fallacy of physicians in general maintaining that the vocal organs are absolutely under the will and control of the patient, since the patient is in reality positively hopeless until proper equilibrium is reëstablished. One point is important to emphasise: in hysterical aphonia both cords are similarly affected always; he, however, cited a curious condition where there was anchylosis of the left arytenoid articulation, leaving the cord fixed near the median line and every effort made by the patient to produce a sound the false cord could be seen closing upon its fellow on the opposite side, and a harsh sound or loud whisper produced that way. This again shows the possible function of the false cords. The paper closed by citing several peculiar and most interesting cases.

Dr. **William C. Krauss** reported a number of unusual cases of hysteria, one of which was of especial interest. It was a young girl, observed with Dr. Ullman, in whom there were unusual contractures; the hands and fingers were in a condition of flexion, the toes in extension. There also was hyperesthesia, a spasm of the orbicularis palpebrarum and aphonia. The patient became bedridden but was eventually cured by suggestion.

Dr. **A. W. Bayliss** gave a lantern slide exhibition on the use of

THE *x*-RAY IN MEDICAL AND SURGICAL PRACTICE.

He showed fractures, dislocations, foreign bodies, deformities of bone and joints, as well as tubercular chests, and other interesting cases were demonstrated

Drs. Sydney A. Dunham, Grosvenor and Krauss discussed the subject.

MEDICAL SOCIETY OF THE COUNTY OF ERIE.

MEMORIAL MEETING.

REPORTED BY FRANKLIN C. GRAM, M. D., Secretary.

A LARGE number of medical practitioners from Buffalo and vicinity, attended the special meeting of the Medical Society of the County of Erie, held in the Young Men's Christian Association parlors, April 11, 1901, at 5 p.m., in memory of Dr. Frank W. Abbott, an esteemed member of the profession, who died April 9, 1901, aged 59 years.

The president, Dr. W. C. PHELPS, in opening the meeting, briefly alluded to the honorable career of the deceased, who graduated in the same class with the president in 1866, and requested the society to take suitable action. He also stated that several other medical organisations had been invited to participate in this meeting.

On motion of Dr. COAKLEY the president appointed Drs. Howe, Rochester and Thos. Lothrop, a committee on memorial.

The committee retired and later presented the following:

MEMORIAL.

As we, the members of the Medical Society of the County of Erie, have learned, with deep regret, of the death of our associate, Dr. Frank Wayland Abbott, we desire to place on record an expression of our appreciation of the great esteem in which he was held.

During the many years that he has worked with us, we have learned to admire his sterling qualities of mind and heart, his strict professional integrity, and the attributes which made him an honor to his profession and a representative of what was best and most admirable as a citizen.

We appreciate especially his services rendered to the medical profession of this city, his careful attention to details of his work, his patience in dealing with difficult questions, and, above all, the high ideals of justice and of professional honor which have marked his course throughout.

In recognition of his admirable character we unite in an expression of deepest regret at the great loss sustained by this society, in sympathy for his family, and for all who came within the circle of his kindly and beneficent influence.

LUCIEN HOWE,
DE LANCEY ROCHESTER,
THOMAS LOTHROP.

Dr. Grove said: It is a painful duty that I, in common with the rest of you assembled, am asked to perform today. I have known Dr. Abbott for twenty-three years. While a student at the medical college and interne at the Buffalo General Hospital, I first became acquainted with him, but I learned to know him more intimately as my colleague at the Charity Eye, Ear, Nose and Throat Hospital. He was one of the founders of this hospital ten years ago. I express only the sentiments of its directors and attending staff when I say it was with pride that he labored for its advancement. Dr. Abbott was always a gentleman in the high and lofty sense, and of strong religious conviction. Speaking of him professionally, he was conservative and reliable. He would discommode himself to favor another. He could not tolerate the methods employed by the trimmer. He would not make use of unbecoming methods in seeking place and position. You could rely upon him for he was candid, frank, and honest. The profession is benefited along the line of true ethics by the life and example of such a man. We shall all miss him and still delight to remember that we knew one endowed with such ennobling qualities.

A telegram was received from Dr. Frederick F. Hoyer, of Tonawanda, in which he expressed his great sorrow at the death of his friend.

The great esteem in which Dr. Abbott was held then manifested itself in the beautiful eulogies which were rendered by many of those present. Dr. James W. Putnam had known him for many years and spoke of his scholastic abilities and his many kindnesses to patients and to young practitioners.

Dr. Irving M. Snow gave a brief account of his last illness. Brief, but feeling remarks were also made by Drs. Howe, Starr, Rochester, Wyckoff, Coakley, Lewis, Pettit, Jewett, Hubbell and James S. Smith.

The memorial was then adopted and the meeting adjourned.

ACTION OF THE PENSION SURGEONS.

The Buffalo Board of U. S. Pension Examining Surgeons, has heard with sorrow of the demise of our associate Dr. Frank W. Abbott, and offer the following brief tribute to his memory.

IN MEMORIAM.

FRANK WAYLAND ABBOTT, M. D.—1842-1901.

We are impressed most deeply at the great loss the service has sustained through the death of Dr. Abbott, when we recall the judicial fairness of all his work relating to the examinations of claimants for pension. His professional skill, always of a high order, was often tested in the extreme, yet never found unequal to the occasion, and the final decision always commanded the approbation of his associates as well as of the Pension Bureau at Washington.

To ourselves the loss is a personal one, for we had each not only come to respect his professional attainments, but to regard him as a friend. His motives were so pure, his ideals so high, and his personality so charming, that we feel as though our little family had been entered and one of its most essential members taken.

FRANK WAYLAND ABBOTT, M. D.—1842–1901.

We extend to the surviving members of Dr. Abbott's family our deepest, tenderest sympathy.

WILLIAM WARREN POTTER,
JUSTIN G. THOMPSON.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

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UNIVERSITY DAY.

COMMENCEMENT OF MEDICAL AND PHARMACAL DEPARTMENTS.

THE fifty-fifth annual commencement of the Medical Department and the fourteenth of the Department of Pharmacy of the University of Buffalo, were held on Friday, April 26, 1901, at the Teck Theatre, at 11 o'clock a. m. This was a departure from the usual custom, it being the first time in the history of the college when these ceremonies were not held in the evening.

THE MORNING.

The curators held their examinations on the day previous, which left commencement day a clear field to the graduation exercises and the alumni meetings.

Beginning at 9.30 in the college building the following class reunions were held: '51 in faculty room—Thomas D. Strong, President, Westfield; '61 in library—William B. Mann, President, Evanston, Ill.; '71 in lecture hall—Devillo W. Harrington, President, Buffalo; '81 in amphitheatre—Carleton C. Frederick, President, Buffalo; '91 in alumni hall—Edward J. Gilray, President, Buffalo.

These several classes talked over the old college days, polished the links in the chain of affection that binds the alumni to their alma mater and to each other, and then took luncheon together at the Iroquois at 12.30 p. m.

While these interesting scenes were occurring at the college the new graduates—the class of 1901—were receiving their degrees at the Teck Theatre, where a large audience had gathered to witness the ceremonies. After prayer by the Rev. Israel Aaron, of Temple

Beth Zion, the secretary of the faculty, Dr. John Parmenter, announced the following-named candidates for the degree of doctor of medicine:

Class in medicine—Charles E. Abbott, Ph. G., William Armstrong, Charles W. Banta, William Brady, Wilhelm Brauns, Charles V. Brooks, Herbert M. Burritt, William Wallace Carleton, George Henry Davis, Patrick M. Donovan, Arthur Eisbein, John Benedict Frisbee, William Tweedy Getman, Charles D. Graney, W. Stuart Grimes, George McKenzie Hall, J. Ralph Harris, John Albert Hobbie, A.B., Joel Samuels Hooper, Harry Horner Hubbell, James Lyman Hutchinson, Bergen Fred. Illston, John Francis Kane, Alfred Crosgrove Kingsley, Theodore M. Leonard, Paul Otto Luedeke, Frederick Williams Parsons, William R. Paterson, Helena B. Pierson, Ph.B., John William Riley, George W. Schaefer, Edward L. A. Schwabe, Ph.G., M. Elizabeth Schugens, Thomas Edwin Spalding, Oscar W. Steinlein, Roy Gilbert Strong, Isidor R. Tillman, Carl Schurz Tompkins, Ira Putnam Trevett, Harry Radley Trick, Eli H. Vail, John A. Weidman, Lee Adrian Whitney, Roy Henry Wixson, Alfred B. Wright, Frederick Zingsheim.

The officers of the class are: President, Ira Putnam Trevett; vice-president, Roy Gilbert Strong; secretary, John William Riley; treasurer, William Wallace Carleton; marshal, Oscar W. Steinlein.

The Chancellor, the Hon. James O. Putnam, clad in his university gown and cap, then conferred the degree according to the usual formula and in token of which he handed each candidate his diploma, who were called upon the stage in groups. After the administration of the Hippocratic oath, by the dean, Professor Mann, the honors for standing were announced, each of the following-named having been marked above 90: J. B. Frisbie, H. H. Hubbell, W. R. Patterson and Ira P. Trevett.

The candidates for the degree in pharmacy were then presented to the chancellor by Dr. John R. Gray, secretary of the faculty of pharmacy. Their names are as follows: William G. Achilles, William G. Barker, Frank W. Barnum, Oscar F. Beck, Clarence H. Bierman, Abraham J. Boulet, Frank O. Brickman, Frank A. Chase, Benjamin C. Cofeld, Henry P. Davies, Jr., Earle J. DeGolier, George J. Dittly, Jr., LaVerne Doremus, Harley E. Dowman, Michael J. FitzMorris, Charles N. Harlowe, William T. Hickelton, Frank L. Horton, Noyes G. Husk, Rudolph D. Janke, Franklin J. Jones, Merton D. Linger, Mrs. Ella J. Lock, James H. McAdam, William P. McNulty, Daniel A. Miller, Rudolph C. Miller, Ralph B.

Nicholson, Arthur H. Reimann, Lloyd R. Richards, Frederick G. Ritter, Harry L. Rider, Samuel Ruckel, George I. Serrins, Leo W. Stall, George Stoll, Luther A. Thomas, Henry S. Vaughan, and Leland J. Waldock.

Willet H. Mosher received a degree as doctor in pharmacy in the post-graduate course. The Peabody prize of $50 for the highest standing in the pharmacy class was awarded to Rudolph C. Miller, of Buffalo. W. P. McBetty won the $25 prize for the best standing in the junior class.

The doctorate address was then delivered by Dr. W. E. Ford, of Utica, professor of electro-therapeutics in the University, who chose for his subject, "Instruments of Precision." It was a scholarly presentation of the theme and was well received. The benediction followed and thus closed the commencement exercises of 1901. The orchestra played several appropriate airs during the proceedings.

THE AFTERNOON AND EVENING.

The Alumni Association held its twenty-sixth annual meeting in Alumni Hall, at the University Building, which was called to order at 2.30 o'clock by the president of the Association, Dr. D. W. Harrington, '71, of Buffalo.

After reading the minutes of the previous sessions, receiving reports of the officers and committees and the transaction of miscellaneous business, the election of officers for the ensuing year was proceeded with, resulting as follows: President, Frank H. Moyer, '72, Moscow, N.Y.; first vice-president, A. W. Bayliss, '89, Buffalo; second vice-president, A. W. Henchell, '89 Rochester; third vice-president, Fridolin Thoma, '87 Buffalo; fourth vice-president, Henry T. Benham, '90, Honeoye Falls, N.Y.; fifth vice-president, Jane W. Carroll, '91, Buffalo; secretary, T. H. McKee, '98, Buffalo; treasurer, Herman K. de Groat, '97, Buffalo; trustee for five years, D. W. Harrington, '71, Buffalo; executive committee, A. T. Lytle, '93, chairman; Grover W. Wende, '89; Franklin W. Barrows, '93; Frank H. Moyer, and John Parmenter, *ex-officiis*.

Then came the president's address, which was a short but interesting paper by the retiring president, Dr. D. W. Harrington, and which was well received.

Professor A. M. Phelps, of New York, ex-president of the Medical Society of the State of New York and professor of orthopedic surgery in the New York Post-Graduate Medical School and Hospital, then read a paper on "Tubercular hip and spine," which was a masterly presentation of this subject. Dr. Phelps illustrated his remarks with drawings and appliances for deformities original in character and instructive in a high degree. He received a round of applause as he finished his discourse. Dr. Phelps's paper was discussed by Drs. Roswell Park, Bernard Bartow, E. M. Dooley and Edward J. Meyer, and some interesting patients, illustrating several prominent features of the subject, were presented.

Then followed a paper on "Smallpox," by Professor William T. Corlett, of Cleveland, O., professor of dermatology in the Medical College of Western Reserve University. This subject was profusely illustrated with superb lantern-slide views, rare in character, and most difficult to obtain. Professor Corlett is an admirable speaker, understands his subject, and presents it in choice and forceful English. As he concluded he was paid the tribute of prolonged applause from an interested audience. This subject was discussed by Drs. A. W. Henchell, of Rochester, and Dr. E. C. W. O'Brien, of Buffalo. Dr. O'Brien was health officer of Buffalo in 1873 during a great epidemic of smallpox, when he saw upwards of 2,000 cases, and he gave some interesting experiences relating to that outbreak. It was at a time when all the larger cities were invaded, but in none was it so quickly brought under control and stamped out as in Buffalo.

The association then adjourned.

In the evening, at 6.30 o'clock, the annual dinner was served at the Hotel Iroquois, at which there were good viands, good speeches and good cheer.

And so ended a very interesting and enjoyable day, for the planning and carrying out of the numerous details of which the executive committee deserves the thanks of everyone who participated in the several events.

SUMMER DRINKS.

THE question what to drink in summer is about as easily answered as that on, "What to wear," both depending, of course, upon an array of limitations, foremost of which is individual taste. Scientists are agreed that the ingestion of large quantities of very cold fluids of whatever nature during the mid-summer days is detrimental and therefore injudicious. The smallest quantity of beverage that will quench thirst and give both relief and pleasure is the drink to be preferred. The milder alcoholics, especially the malt liquors, possess some of the necessary qualifications for a good healthy drink, but they also possess a disadvantage in that they contain a variable amount of alcohol which exerts a reactionary influence upon the overheated system. One of the constituents of these malt liquors, which renders them so palatable to many is the carbonic acid with which they are charged, and to this is their thirst quenching properties largely dependent. Another property possessed by these beverages is their stomachic influence, encouraging the flow of the stomach juices and therefore acting as a tonic. Their administration in some of the asthenic conditions of the human system is therefore beneficial and in good practice.

A beverage that will combine the good qualities of the malt liquors exclusive of the alcohol, will come pretty near reaching the goal as an ideal summer drink. Ginger ale is that substitute drink which is pleasant, thirst-quenching, healthful, and therefore meets the requirements of the critical and fastidious. In its manufacture the water entering into its composition is thoroughly aseptisised by heat; the normal oxygen replaced by carbonic acid and the insipid taste of the boiled water replaced by that of syrup of ginger, which is both pleasant, and beneficial. Ginger is an agreeable carminative and stimulant, increasing the stomach and intestinal secretions and promoting peristalsis. It also prevents flatulence and increases the flow of urine. It is therefore an important medicinal agent, and when carefully and methodically mixed with absolutely pure water charged with carbonic acid, furnishes a compound that ought to be more often prescribed by the physician and more frequently imbibed by the laity, especially during the summer months.

Its effect upon febrile conditions is a most happy one. The parched tongue and lips, the nonsecreting membranes of the esophagus and stomach, the sluggish intestine, all cry out for relief, and none comes more quickly than that from a cool draught of sparkling ginger ale.

SUMMER NOISES.

WITH the approach of summer with its open doors and windows, the inhabitants of the large cities will be annoyed and disturbed by the multitudinous noises incident to city life. While many of these cannot be avoided, yet many can be curtailed and the most flagrant certainly held in check. The JOURNAL has repeatedly called attention to the unnecessary noises, and now at the beginning of the Pan-American summer when a horde of visitors and strangers is expected in the city, street noises will be necessarily augmented. Late at night and in the early morning are the times of day when the loud street noises especially jar on one's sensitive nature.

These are the hours when many of our visitors are returning from the exposition grounds, and although the great majority of them will be quiet and decorous, yet some among them will insist on making noisy demonstrations unless otherwise instructed. All of us cannot jubilate at the same time. While some carouse others must work, and those who do work must have freedom from annoyance during certain parts of the day.

Perfect health demands a certain amount of quiet and repose not alone at night during sleeping hours, but during waking hours as well. The active working brain is just as much in need of rest as are the muscles of the different portion of the body, and, perhaps, the most potent factor in accomplishing this need is to secure freedom from noise. The brain, as a whole, cannot be in perfect repose when certain centers are in a state of action or irritation. The association fibers, connecting all the various centers and parts of the brain, convey the irritation from one center to another and soon the whole brain is in sympathy with the disturbed and agitated region.

The dangers arising from noises are two-fold. First, at the tympanum, where a certain amount of hyperemia and hypertrophy are liable to result, sometimes even rupture of the tympanum, producing partial or total deafness, and secondly, at the auditory center, where fatigue is apt to follow the incessant activity and irritation of these centers, and a general brain tire or brain exhaustion is liable to result.

SOCIETY FOR THE PREVENTION OF TUBERCULOSIS.

ON APRIL 18, 1901, the Erie County Society for the Prevention of Tuberculosis was launched under the auspices of members of the medical profession and others, interested in checking the ravages of that most destructive disease.

The organisation was perfected on April 24th, at a meeting held in Mayor Diehl's office. In accordance with the provisions in the constitution and by-laws, adopted on April 18th, the following-named persons were elected as a board of directors to serve for the periods named: Until May, 1902, Mayor Conrad Diehl, Health Commissioner Ernest Wende, Dr. Lee H. Smith, president of the Society of Natural Sciences, Dr. Mary I. Denton, president of the Investigating Club; until May, 1903, Dr. John H. Pryor, Dr. J. C. Thompson, The Rev. Thomas A. Donahue, D. D., Dr. Albert H. Briggs and Dr. William G. Bissell; until May, 1904, Dr. Benjamin G. Long, the Rev. O. P. Gifford, D.D., Dr. James S. Smith, Dr. Henry R. Hopkins and Dr. Charles E. Congdon.

The lines of work are laid down as follows: (1) by promulgating the doctrine of the contagiousness of the disease; (2) instructing the public in practical methods of its avoidance and prevention; (3) advocating the establishment of institutions for early treatment; (4) co-operating with boards of health in such measures as may tend to the prevention of the disease; (5) advocating the enactment of proper legislation; (6) taking such other measures as may from time to time be deemed necessary to check the ravages of tuberculosis.

The Erie County society is local in scope and is the first of its kind to be formed in this state; an organisation of a similar nature in Philadelphia has done much to prevent the spread of consumption. The membership is not to be confined to the medical profession, as any person who pays $1.00 or more, is a member for the year in which the payment is made. It is the desire, however, of the promotors, that the medical profession shall ally themselves with this work to a man.

Meetings of the members are to be held semi-annually, while the directors are to meet monthly. Any one who wishes to assist in this meritorious work, can send his name and $1.00 or more to the treasurer, Dr. A. H. Briggs, 267 Hudson Street, and a receipt will be mailed to him.

Bulletins and other matter issued by the society will be placed in the hands of the members and they will be urged so far as possible to assist in the education of the public along the lines of prevention. The movement starts off well with an enthusiastic board of directors, whose aim is to do much good for our fair city.

The following well-known physicians were elected officers for the ensuing year.

President, Dr. Benjamin G. Long; vice-president, Dr. Henry R. Hopkins; secretary, Dr. William G. Bissell; treasurer, Dr. Albert H. Briggs.

PERSONAL.

Dr. Abraham Jacobi, of New York, celebrated the 50th anniversary of his professional life at the New York Academy, April 5, 1901. He received and entertained a large number of his friends, physicians and laymen from 9 to 12 p.m., when he read to them a paper entitled, "German Text-books Half a Century Ago; History and Reminiscences."

It told of his experiences in the medical schools of the Universities of Greifswald, Göttingen and Bonn, teeming with anecdotes and recollections of his teachers and school friends.

The principal text-books which he had studied at the universities were arranged on the table in front of the chair usually occupied by the president of the academy. These book form an interesting collection, though not many in number. They contain on many pages annotations that were written by him. Dr. Jacobi gave these books to the library of the academy at the conclusion of his remarks, and altogether has made gifts of books to the library to the number of more than 1,000 volumes.

Dr. Edward B. Angell, of 295 Alexander Street, Rochester, N.Y., will sail for Europe Saturday, May 4, 1901, going direct to Naples. From there he will go to Vienna, thence to Berlin, afterward to Paris, and finally to London. These are his objective points, but other places will be visited either for study or pleasure. Dr. Angell will return in September and will take part in the meeting of the Medical Association of Central New York, to be held at Buffalo in October.

Dr. Richard Curran, of Rochester, N.Y., has been visiting the physicians of Buffalo during the past month, in the interest of the Duffy Malt Whiskey Co. Dr. Curran was mayor of Rochester for a term and also served in the legislature. He served as a surgeon of cavalry in the civil war and won a medal of honor.

Dr. George Blumer, of the Bender Laboratory, Albany, has been appointed director of the new bureau of bacteriology and pathology in the newly created state department of health. It will be one of the most important bureaus under the health commissioner, as tests will be made to detect tuberculosis, diphtheria and other diseases.

Dr. William Warren Potter, of Buffalo, has accepted the invitation of the faculty of the Hospital College of Medicine, of Louisville, Ky., to deliver the doctorate address at the commencement exercises of the college to be held at Macauley's Theatre, the last week in June, 1901.

Dr. Charles L. Scudder, of Boston, surgeon of the Massachusetts General Hospital, addressed the meeting of the Buffalo Academy of Medicine in the Buffalo Library Building, Tuesday evening, April 2, 1901, on "Diagnosis and Treatment of Contusions of the Abdomen." It was an able presentation of a most important subject. Dr. Scudder was entertained at dinner before the meeting by Dr. Chauncey P. Smith, who invited a number of medical friends to meet the guest of honor.

Dr. John H. Grant, of Buffalo, commissioner of agriculture for the State of New York, has removed his residence from 176 Virginia Street, Buffalo, to Union Street, Hamburg. His Buffalo address and office are at No. 893 Ellicott Square, Buffalo.

Dr. and Mrs. G. A. Himmelsbach, of Buffalo, will sail in June for a three months' trip to Europe. They will travel extensively on the continent and Dr. Himmelsbach will visit some of the clinics in Vienna and other medical centers.

Dr. Francis M. O'Gorman, of Buffalo, has removed from the Carmichael to his new office and residence, No. 1298 Jefferson St., (formerly Dr. C. B. LeVan's.) Hours: 8 to 9.30 a. m; 1 to 3, 6 to 8 p.m; Telephone.

Dr. R. A. Patchin, U. B., '69, a prominent physician of Des Moines, Ia., visited Buffalo recently, calling on Dr. Conrad Diehl and Dr. George W. Pattison, of Chippewa Street, classmates.

OBITUARY.

DEATH OF DR. SAMUEL G. DORR.

Dr. Samuel Griswold Dorr, U. of B., '75, postmaster of Buffalo, died of angina pectoris, at his home in this city, Sunday morning, April 28, 1901, aged 61. He left the postoffice at 7 o'clock the evening previous, apparently in his usual good health. He retired early without complaint and slept well all night; but about 6 o'clock Sunday morning he called his son, Dr. L. Bradley Dorr, an accomplished physician, on account of severe pain in his left chest. Dr. Dorr, Jr., recognising the severity of the attack, began at once to administer the usual remedies; but they did not avail except in the most temporary way, and his father expired near 8 a. m., or only about two hours after the known onset of the malady. The suddenness of the death came as a great shock to the entire city. Dr. Dorr came of ancient German lineage and Edmund Dorr, one of his ancestors, came from England to Connecticut early in the XVIII. century. Captain Matthew Dorr, another of his ancestors, distinguished himself in the war of the revolution. Edmund Dorr,

SAMUEL G. DORR, M. D.—1840–1901.

before alluded to, married a member of the distinguished Griswold family, from which Dr. Dorr derived his middle name.

Samuel Griswold Dorr was born at Dansville, N. Y., May 30, 1840, where he spent a portion of his early life. He received his preliminary education at Nunda Academy in this state and at the Albion State Academy in Wisconsin. After graduating from the latter he returned to Dansville, where he engaged in the milling business. Upon the outbreak of the civil war he enlisted in the union army, but almost immediately he was seized with diphtheria, which invalided him for a year, hence he was unable to go to the field. In 1863, however, he was appointed a recruiting agent in Livingston county, where he rendered valuable service during the remainder of the war period. After peace came he engaged in the oil refining business in Pennsylvania and established a barrel factory as a collateral branch of the business. These occupations, however, were not suited to his desires and he turned his attention to medicine, following in this way the traditions of his family. In 1873 he came to Buffalo and entered the University as a student. He took his doctorate degree with honor in 1875 and immediately established himself in practice in this city.

Dr. Dorr soon found himself busily engaged in his profession, which he continued to practise until his death. His clientèle was numerous, attached, even affectionate, and he possessed the respect, not only of his colleagues in the medical profession, but of a very large community that knew him well, and with whose kindly acts and gentle demeanor they were familiar. He served two terms as police surgeon, was at one time a member of the consulting staff of the Sisters of Charity Hospital and a member of the several local medical societies. In 1888 he served in the national republican convention at Chicago. In 1899 he was appointed postmaster of Buffalo by President McKinley and entered upon the duties of that office April 1, in that year. He faithfully served in that capacity until death so ruthlessly terminated his official career. At the recent dedication of the new post office building his courtly figure will be well remembered by the thousands present on that occasion, as he sat near the postmaster general and modestly performed his part in the ceremonies. During the progress of the proceedings he dictated a letter to the President that was sealed and posted by the postmaster-general and sent to Washington in a special pouch.

Dr. Dorr married Rebecca Bradley, of Dansville, July 7, 1864. His widow survives, together with one son, Dr. L. Bradley Dorr, and five daughters. His funeral was largely attended on Tuesday, April 30, by physicians and citizens in general, many of whom were intimate personal friends of the distinguished physician. The remains were intered in the family lot at Dansville, N.Y.

DEATH OF DR. F. W. ABBOTT.

DR. FRANK WAYLAND ABBOTT, U. of B., '66, died at his home, 523 Franklin Street, Buffalo, Tuesday, April 9, 1901, after a protracted illness, aged 59 years. Dr. Abbott for years has occupied a prominent place in the profession of medicine, distinguished for his skill, judgment, accuracy and integrity. He was one of the most prominent ophthalmologists and otologists in Buffalo, serving in that capacity on the staff of the General Hospital, on the Erie County Charity Eye, Ear and Throat Hospital, and as a member of the Board of Pension Surgeons. For many years he was chairman of the executive committee of the Buffalo General Hospital Training School for Nurses.

Dr. Abbott was a lay reader of the Episcopal Church and has done much excellent work in that capacity. He is survived by his widow and one son, Wayne Abbott. His funeral was held from St. Paul's Church, April 12, at 4 o'clock, Rev. J. A. Regester and Rev. G. B. Richards officiated. The bearers were Mr. Henry R. Howland, Dr. H. R. Hopkins, Dr. W. C. Phelps, Dr. Lorenzo Burrows, Dr. A. A. Hubbell, Dr. M. D. Mann, Dr. E. C. W. O'Brien and Dr. John Parmenter. The interment was in the family lot in Forest Lawn. Elsewhere in the JOURNAL we publish the action of several bodies of which Dr. Abbott was a member.

MR. WILLIAM R. WARNER, of Philadelphia, the founder of the firm of Wm. R. Warner & Co., manufacturing chemists, died at his home in that city Wednesday, April 3, 1901. He was distantly related to George Washington, and his art collection included over 100 portraits of the Father of his Country, as well as portraits of distinguished physicians, scientists and pharmaceutists. In 1860 he was appointed a member of the committee of revision of the United States Pharmacopeia, and he was for many years a member of the Philadelphia College of Pharmacy.

DR. WILLIAM H. DRAPER, of New York, one of the most prominent physicians in this country, died at his residence in that city, Friday, April 26, 1901, after a somewhat prolonged period of ill health. Dr. Draper has been prominent as a writer and teacher for thirty years or more, and was justly regarded as a leader in medical thought.

SOCIETY MEETINGS.

THE Buffalo Academy of Medicine held meetings during the months of March and April, 1901, as follows:

Section on Obstetrics.—Tuesday evening, March 26th. Program: Ovarian hernia, Stephen Y. Howell; Pelvic disease and its relation to insanity, Lawrence G. Hanley.

Tuesday evening, April 23d. Program: The operative treatment of prolapsus uteri, M. D. Mann; The correction of face presentations, John V. Woodruff.

Section on Surgery.—Tuesday evening, April 2d. Program: Diagnosis and treatment of contusions of the abdomen, Charles L. Scudder, Boston, Mass.; discussion opened by Roswell Park.

Section on Medicine.—Tuesday evening, April 9th. Program: How are we educating our children? A. W. Bayliss; discussed by Henry P. Emerson, Esq., superintendent of public instruction; P. W. VanPeyma, of the board of school examiners; Henry R. Hopkins, and Mr. Adolph Miers, instructor of gymnastics of the Buffalo gymnasium.

Section on Ophthalmology, Otology and Laryngology.—Monday evening, April 15th. Program: (1) A point in physiological optics; (2) A new form of artificial eye, Lucien Howe. A case of primary tuberculosis of the eye, Edmund E. Blaauw.

Section on Pathology.—Tuesday evening, April 16th. Program: Report of a case of retroperitoneal sarcoma, Chas. E. Congdon; The pathology of Asthma, Geo. N. Jack.

THE National Confederation of State Medical Examining and Licensing Boards will hold its annual meeting at St. Paul, Minn., June 3, 1901, under the presidency of Dr. J. N. McCormack, of Bowling Green, Ky. The committee on Interstate Reciprocity and Uniform Medical Legislation will present its report and the meeting will be one of great interest and importance. The present officers are: President, J. N. McCormack, Bowling Green; vice-presidents, N. R. Coleman, Columbus; James A. Egan, Springfield, Ill.; secretary-treasurer, A. Walter Suiter, Herkimer, N.Y.; executive council —Chairman, William S. Foster, Pittsburg; Joseph M. Mathews, Louisville; William A. Spurgeon, Muncie, Ind; William Warren Potter, Buffalo; Augustus Korndoerfer, Philadelphia. Committee on interstate reciprocity and uniform medical legislation– -Chairman, William A. Spurgeon, Muncie, Ind.; Gardner T. Swarts, Providence; secretary, Emil Amberg, 32 Adams Ave., W., Detroit; Augustus Korndoerfer, Philadelphia; Edwin B. Harvey, Boston.

THE American Medical Association will hold its forty-second annual meeting at St. Paul, Minn., Tuesday, Wednesday, Thursday and Friday, June 4,5,6 and 7,1901, under the presidency of Dr. Charles A. L. Reed, of Cincinnati. A large and enthusiastic meeting is anticipated and an elaborate program is in course of preparation.

THE American Academy of Medicine will hold its twenty-sixth annual meeting at the Hotel Aberdeen, St. Paul, Minn., on Saturday, June 1, 1901, executive session at 11 a.m., open session beginning at 12 m, and continuing through Monday, June 5, under the presidency of Dr. S. D. Risley, of Philadelphia. The principal features of the meeting will be a symposium on Institutionalism and another on Reciprocity in Medical Licensure. The president's address will be delivered on Saturday evening, June 1, and the annual social session will be held Monday evening, June 3. Members of the profession are always welcomed to the open sessions of the academy. Dr. Charles McIntire, of Easton, Pa., is the secretary.

THE American Proctologic Society will hold its third annual meeting at the Hotel Aberdeen, St. Paul, Minn., Tuesday and Wednesday, June 4 and 5, 1901. The following are the officers: President, James P. Tuttle, New York; vice-president, Thomas Charles Martin, Cleveland; sec.-treas., William M. Beach, Pittsburg. Executive Council—Samuel T. Earle, Jr., Baltimore; A Bennett Cooke, Nashville; J. Rawson Pennington, Chicago.

THE American Pediatric Society will hold its annual meeting at the International Hotel, Niagara Falls, Monday, Tuesday and Wednesday, May 27, 28 and 29, 1901, under the presidency of Dr. W. T. Booker, of Baltimore. The sessions of the society will be held from 9 a.m. to 12 m., and from 2 to 4 p.m. each day. Papers of high scientific interest are to be read. The profession of Buffalo, Canada and Western New York are most cordially invited to attend. Dr. Samuel S. Adams, of Washington, is the secretary and Dr. Irving M. Snow, of Buffalo, is chairman of the local committee of arrangements.

THE Niagara Falls Academy of Medicine held its regular meeting on Monday evening, April 1, 1901, at the office of Dr. N. W. Price. Dr. J. S. Dorian, read a paper on Vaccination.

AT THE 95th annual session of the Medical Society of the State of New York, held at Albany, January 29, 30, 31, 1901, it was moved and unanimously adopted that in order to increase the facilities for becoming permanent members of the society, each county society should be allowed to send five times the number of delegates it had formerly sent to the state society.

These delegates are elected for a term of three years and are eligible for permanent membership if they register twice during that time. This will make the number of delegates from the county societies to the state society 750 in all, or one delegate for every eight or nine members of county societies, without increase or expense to the county societies.

It was further agreed to respond to a widely expressed desire that the society hold a semiannual meeting in the City of New York in the early autumn to be devoted entirely to scientific work and social intercourse.

The officers of the society announce that they have engaged the New York Academy of Medicine for this purpose, where a meeting of two days duration will be held, October 15, 16, 1901.

Members wishing to read papers are requested to communicate with Dr. Nathan Jacobson, 430 South Salina Street, Syracuse; and information of any other nature can be obtained from Dr. Frederic C. Curtis, secretary, 17 Washington Avenue, Albany, or from Dr. Frank Van Fleet, associate secretary, 63 E. 79th Street, New York City.

It is further announced that the society will tender a reception to its members, delegates, and guests on the evening of October 15, at Delmonico's. Tickets of admission to this reception will be furnished without cost to all who register at the semiannual meeting, as well as to the society's guests

THE Western Ophthalmic and Oto-Laryngologic Association held its sixth annual meeting at Cincinnati, O., April 11 and 12, 1901. The following officers were elected: President, C. R. Holmes, Cincinnati, O.; 1st vice-president, W. L. Dayton, Lincoln, Neb.; 2d vice-president, J. O. Stillson, Indianapolis, Ind.; 3d vice-president, H. W. Loeb, St. Louis, Mo.; treasurer, O. J. Stein, 100 State Street, Chicago, Ill.; secretary, Wm. L. Ballenger, 100 State Street, Chicago, Ill. Forty new members were elected.

The next meeting will be held in Chicago, April 10, 11 and 12, 1902.

COLLEGE AND HOSPITAL NOTES.

THE German Hospital Dispensary staff has been reorganised. The following-named new members have been added: Dr. Frederick H. Millener, Dr. Julian A. Reister, Dr. Abram L. Weil, Dr. Frederick W. Koehler, Dr. Charles J. Mengis, Dr. Charles Filsinger, Dr. Edward A. Schweigert, Dr. Henry J. Siedler, Dr. Louis E. Beyer and Dr. Thomas Phillips.

THE Buffalo General Hospital has issued its 42d annual report, which is for the year 1900. From it we learn that during that year there were treated in hospital 2,783 patients, of which 1,184 were medical, and 1,104 were general surgical cases. Besides these there were 15 ophthalmological, 49 otological and rhino-laryngological, and 431 gynecological patients treated or operated. The financial condition is strong, but it has a floating debt of $33,000, which has accumulated during the last five years. This is due to the fact that the city pays less than the cost of maintenance for the patients it sends to the hospital.

It has been calculated that the deficiency represents almost exactly $2 a week on the city patients that have been at the General Hospital during that time. So, if the city had paid $6 a week instead of $4 a week, the hospital would not now be facing a shortage of $33,000, although it would still have contributed to the poor in care and medical treatment nearly $45,000, since the expense per capita is over $9 a week, and one-third of that on all city patients would have been paid by the hospital.

This is an evil that the municipal government should make haste to correct.

THE College of Medicine, Syracuse University, has a four years' course of study. Its facilities for instruction are unusually good. The main building, erected 1896, was carefully planned and constructed to meet in the most approved manner the requirements of a medical education of the present time. Competent judges pronounce this college unsurpassed in the state.

THE New Orleans Polyclinic will, on account of various requests, continue its sessions to May 31, instead of May 11, 1901, as announced in the catalogue.

AT the Buffalo General Hospital the changes in the resident staff are as follows: Dr. Edgar McGuire, senior surgeon, has been promoted to the position of house surgeon, to fill the vacancy that occurred upon the expiration of Dr. Alfred Zittel's term on May 1. Dr. Edwin R. Gould has been promoted to the position of house physician in place of Dr. William I. Thornton, whose position also expired on May 1. Dr. Charles Chance and Dr. David King will take the places made vacant by these promotions, while Dr. Tripp and Dr. Leonard will be junior surgeon and junior physician respectively.

THE New York State Hospital for the Care of Crippled and Deformed Children, was opened in Tarrytown, December 1, 1900, and ten boys and girls are now there. The number of beds is limited to twenty-five. One of the difficulties connected with the state applicants lies in the fact that no funds are available to meet their traveling expenses. An effort to remove this obstacle was made in the last legislature.

Patients living at remote points of the state are referred to the following physicians, who are out-of-town members of the consulting staff: Drs. A. Vander Veer and S. B. Ward, of Albany, N. Y.; Dr. Louis A. Weigel, Rochester, N. Y.; Drs. Roswell Park and Charles G. Stockton, of Buffalo, N. Y., and Dr. Richard B. Coutant, of Tarrytown, N. Y.

Book Reviews.

URINARY DIAGNOSIS AND TREATMENT. By J. W. WAINWRIGHT, M. D., Member of the American Medical Association, New York State Medical Association, New York County Medical Association, etc. Illustrated with numerous engravings and colored plates, 140 pages. Chicago: G P. Engelhard & Co. 1900. [Price, $1.00.]

The author's effort consists of about 118 pages of reading matter, several pages of test formulas and favorite prescriptions; also, about a dozen plates, these being in color.

Semen as a cause of opacity in freshly passed urine is not mentioned. It should have been, for at times this substance will be found to be a cause of marked turbidity, and this in the absence of any disease of the urinary organs. Wainwright fails to mention the quickest test for uric acid (not accurately quantitative, but amply so for ascertaining its presence) when in excess—namely, nitric acid placed below the urine with the development of a white band in the clear urine, about midway between the line of contact and the upper surface. He speaks several times regarding the amount of urea excreted as being important in the giving of a prognosis in certain conditions, but fails to mention the fact that as nitrogen is eliminated as urea, uric and hippuric acid, it is absolutely necessary that the amount of the two latter be known, for urea may be greatly diminished; whereas uric and hippuric acid may be present to an extent which will show that all nitrogen is being eliminated from the system.

Wainwright should not have failed to mention, even give prominence to, Purdy's test for albumin, for with this simple and quickly performed method, phosphates, mucin, and the like, are not coagulated, heat affecting the serum albumin only. We cannot accept the statement that uric acid crystals are always colored, for it is well known that one form, envelope shaped, are colorless (Tyson, Simon). Wainwright takes up diagnosis and treatment of diseases of the urinary organs, suggesting in the preface that his consideration of these is for the benefit of the busy practitioners, who have not the time to read several pages when sufficient information can be gained from a few words. If these assertions could be verified it would make that portion of the work very valuable, but they are not, and his opinion and advice is open to much criticism. For instance, in the care of acute nephritis no mention is made of any drug internally to diminish arterial tension; and the advice to use Basham's mixture in all conditions of chronic nephritis is an inexcusable error, for it is well known that in certain cases (plethora, for instance) iron is not only positively contraindicated, but it is deleterious. No mention is made of iodide of potash, mercury or glonoin, life-savers at times, and of inestimable value in many chronic conditions. To say if urine is passed in two or more receptacles, or obtained by a sterilised catheter, and the last contains bacteria, that cystitis is present, means simply that the writer is not acquainted with the anatomy or physiology of the urinary organs. In chronic posterior urethritis the last portion of urine will contain bacteria, even though it has been collected from the twelfth division.

Cystitis should be treated from the moment of onset by local medication and a cure obtained in a few hours instead of days or weeks, as would be the result if the author's advice was followed. It can scarcely be conceived why that most powerful agent, silver nitrate, receives no mention in the treatment of inflammations of this locality. Six pages of favorite prescriptions are given, many of which are valuable, but the author's attention must to be called to one for diabetes insipidus, page 124. This is probably a typographical error, but, nevertheless, it is a serious blunder to allow 80 grains of gallic acid to be advised as one dose, to be taken three or four times a day. Another supposed typographical error occurs on page 89, where Wainwright advises the use of a half inch oil immersion lens, no such an objective being made.

This work cannot be considered a pocket edition, as it is too large for one's pocket, but if the latter portion—diagnosis, treatment and favorite prescriptions—had been eliminated, it would have been a most valuable treatise for the physician who wants an epitomé on the urine. J. H. D.

INFANT FEEDING IN HEALTH AND DISEASE. A modern book on all Methods of Feeding. For Students, Practitioners and Nurses. By LOUIS FISCHER, M. D., Attending Physician to the Children's Service of the New York German Poliklinik; Bacteriologist to St. Mark's Hospital; Professor of Diseases of Children in the New York School of Clinical Medicine; Attending Physician to the Children's Department of the West Side German Dispensary. Containing 52 illustrations, with 16 charts and tables, mostly original. 368 pages. Philadelphia: F. A. Davis Company. 1901. [Price, $1.50, net]

Dr. Fischer has written a little book which every physician who has anything to do with infant feeding will welcome. It is one of those rare medical works over which one is apt to grow extravagant in praise, containing as it does so much that one often desires to know and has no means of finding out.

The first chapters are devoted to the anatomy and physiology of the infantile digestive tract. Breast feeding and the clinical examination of breast-milk are fully considered. Then follow chapters on the various methods of substitute feeding. Part second deals especially with the feeding of sick children, including the feeding of the prematurely born, diphtheria intubation cases, and rectal feeding.

Analysis of the most common proprietary foods, not in the dry state, but as prepared for use, are given. This alone makes the volume worth its cost, for who has not desired to know what he was actually giving his little patients? Laboratory or modified milk is discussed at considerable length, the experience of Dr. Fischer in the use of this form of infant food being that of many, if not most who have tried it.

Altogether this is a most complete and practical treatise on infant feeding and one which deserves a ready and large sale.

M. J. F.

A SYSTEM OF PRACTICAL THERAPEUTICS. By Eminent American and Foreign Authorities. Edited by HOBART AMORY HARE, M. D., Professor of Therapeutics, Jefferson Medical College; Physician to Jefferson College Hospital, etc., Philadelphia. New (2d) edition, thoroughly revised. In three octavo volumes, containing 2593 pages, with 427 engravings, and 26 full-page colored plates. Philadelphia and New York: Lea Brothers & Co. 1901. [Price, per volume, cloth, $5.00; leather, $6.00; half morocco, $7.00.]

Two volumes of this excellent system of therapeutics have already been reviewed in this journal (April, 1901.) It is with pleasure that we present our readers with a brief comment on the third volume that is devoted to surgical treatment. Its contents include the following:

Anesthesia and anesthetics (new), by Charles Lester Leonard; Surgical technique (new), by Charles H. Frazier; The treatment of fractures and dislocations (new), by Henry R. Wharton; Minor surgery and bandaging (new), by George W. Spencer; Cerebral concussion and shock, Joseph Ransohoff; Pleural effusion and empyema, abscess and gangrene of the lung, by A. J. McCosh; Peritonitis, non-operative and post-operative, appendicitis, paratyphlitic abscess and obstruction of the bowels, by George Ryerson Fowler; Obstruction of the intestines, by Edward Martin; Diseases of the rectum and anus, by Joseph M. Mathews; Therapeutics of the male genito-urinary tract, by William T. Belfield; Therapeutics of the genito-urinary diseases of women, by Edward E. Montgomery; Therapeutics of pregnancy, parturition and the puerperal state (new), by Edward P. Davis; Diseases of the eye and their treatment by the general practitioner, by Casey A. Wood; Diseases of the ear and their treatment by the general practitioner, by S. MacCuen Smith; Diseases of the nasal chambers and associated affections, by E. Fletcher Ingals; Diseases of the uvula, the pharynx and larynx, by D. Braden Kyle.

Even a cursory inspection of the foregoing list of subjects and authors, will convince the experienced physician that this volume contains just such information as the general practitioner of medicine needs when, as is always likely to happen, he is called upon to do surgical work, and especially to conduct post-operative management.

We have been interested especially in the chapters on anesthesia, surgical technique, fractures, minor surgery, peritonitis and appendicitis, obstruction of the intestines and diseases of the rectum. Each one of these contains much of a practical character that confronts a physician almost every day. The volume, too, is well illustrated; in particular are Dr. Fowler's plates, showing each step in the operation for appendicitis, and the illustrations of minor surgery are to be commended for clearness and artistic excellence.

The system, as a whole, is one of the most important additions a busy physician can make to the working literature of his library.

SANITY OF MIND. A Study of its Conditions, and of the Means to its Development and Preservation. By DAVID F. LINCOLN, M. D., Author of "School and Industrial Hygiene," etc. Duodecimo, pp. 183. New York and London: G. P. Putnam's Sons. 1900. [Price, $1.25]

This little book is a vigorous, healthy protest against fatalism. The thesis that characters are developed by self is maintained by the author. He has no doubt that the individual has a share in character building and believes that he has the power of choosing between different ways of spending his time.

As he says: "If we are living under the fatalistic impression which is so easily brought on by hearing of one or two good cases of heredity, the whole argument of self-control will take a goody-goody aspect, and will seem a perfunctory preachment on the author's part."

The chief practical value of this book is in chapter four. Here he discusses education based upon the study of development. He gives attention to bodily training; the teaching of the feeble-minded and the backward; and the effects of over study. On this last point the author states that in the United States and Canada the question of overwork, as regards the amount of time involved, is practically settled among intelligent educators. He contends that the food question is of more importance, for it is now the fashion to concentrate all the work between 8.30 and 1.30. The result has been, as one prominent educator reported, "that the last hour of the morning is practically time thrown away—it is merely the spurring on of the exhausted." This can be obviated, as at the Pratt Institute, by serving a proper hot lunch in the middle of the forenoon.

The object of the book is the discussion of what tends to promote sanity of mind and what tends to destroy it. His definition is new and strong; "sanity is harmony with one's psychic environment." The author wisely contends that the lesson of self-control must be learned by the young, for the habit self-control is of the greatest importance as a means of checking tendencies to mental disorder. Of disobedience he says "it is a mental habit which predisposes to mental derangement."

It is a temptation to quote freely from the author's terse sentences, so full is the book of wise counsel, and scientific psychology. We earnestly recommend it to teachers, parents and physicians.

J. W. P.

INTRODUCTION TO THE STUDY OF MEDICINE. By G. H. ROGER, Professor Extra ordinary in the Faculty of Medicine of Paris; Member of the Biological Society; Physician to the Hospital of Porte D'Aubervilliers. Authorised translation by M. S. Gabriel, M. D., with additions by the author. Octavo, pp. 551. New York: D. Appleton & Co. 1901. [Price, cloth, $5 00; sheep, $6.00.]

This work is constructed on entirely new lines of medical teaching, at least as far as this country is concerned. It is a reproduction of a course of lectures delivered at the University of Paris, the object of which was to teach students how to begin the study of medicine, how to economise time, and what books to read. Professor Roger is an interesting teacher; he adopts a simple plan and uses simple language in its explanation. He unfolds the object of medicine as a science and an art, tells by what means it may be studied, explains how one becomes sick, and then proceeds to the consideration of morbific influences that constantly threaten the stability of health.

The distinguished author devotes 200 or more pages to the examination of the sick as a distinct and separate subject, every page of which is full of useful information, and all may be read with profit by every physician. While Roger does not belittle the importance of experimental pathology he advances clinical investigations to their true place, not second to but abreast of the former, in the interpretation of the language of disease.

The lectures embrace every known element in the causation of disease and its cure. They deal with mechanical, physical, chemical and animate agents; with the etiology of infections and the pathogenesis of infectious diseases; with nervous reactions, disturbances of nutrition, and autointoxications; with heredity, inflammation, and septicemia; with tumors, cellular degeneration, functional synergies and morbid sympathies; with evolution of diseases, clinical application of scientific procedures, diagnosis, prognosis and therapeutics. These and many other factors in disease and cure are discoursed upon with clearness, and the author follows step by step the morbid processes, avoiding mere theories, but reporting results that appear to be final.

It is difficult to classify this work, because it is so unique as to be *sui generis.* It is, in the main, a book that may be read with better understanding by the advanced student, but may justly be considered a contribution to high class medical literature.

FOOD AND THE PRINCIPLES OF DIETETICS. By ROBERT HUTCHISON, M. D., Edin., M. R. C. P., Assistant Physician to the London Hospital and to the Hospital for Sick Children, Great Ormond street. Octavo, pp. 566. With plates and diagrams. New York: William Wood & Co. 1900.

The contents of this book, the author announces in the preface, were first addressed to the students of the London Hospital in the form of a course of lectures, their gratifying reception leading to their presentation in book form. The medical public is to be congratulated that circumstances led Dr. Hutchison to the publication of these lectures.

The subject of dietetics is one which is daily demanding more and more attention, and yet many of us are too ignorant to intelligently advise our patients as we ought. To a certain extent foods, their digestibility and their relative nutritive value receive some notice in the current text-books on physiology and are perhaps more or less dwelt upon in lectures upon physiology, hygiene, or medicine. Their economic value is seldom if ever touched upon, yet it is of no small importance to the physician to be able to suit his diet list to his patient's purse. What knowledge the doctor has of the proper cooking of food is usually a matter of chance. He has hardly considered it in his province to know how a potato should be boiled.

Here in this volume are gathered together practically all that is at present known of the subject of dietetics, the book representing the results reached by many careful observers in many lands. Nothing has been considered too trivial to receive attention, if it has a practical bearing on the subject. The relative values of foods, food in health, the effect of occupation upon the amount of food required, detailed analyses of all the common foods, and of many not common, —vegetarianism, beverages, including alcohol, the cooking of foods, digestion, infant feeding, and feeding in disease,—are all considered fully, clearly and practically. Completeness, so far as possible, is evident on every page.

It is a book so full of useful information that the reader cannot but pursue it with profit, and yet so simple and delightful is the author's style that even the layman may read it with pleasure.

M. J. F.

COMPARATIVE PHYSIOLOGY OF THE BRAIN AND COMPARATIVE PSYCHOLOGY. By JACQUES LOEB, M. D., Professor of Physiology in the University of Chicago. Duodecimo, pp. 309. Illustrated. New York: G. P. Putnam's Sons. 1900. [Price, $2.00.]

The author has written a work based upon actual experiments and close observation of the lower forms of animal life. The first chapter is devoted to spontaneity and coördination by many experiments on medusæ. This is followed by studies upon ascidians and actinians, echinoderms, worms, arthropods, mollusks and vertebrates.

These experiments are carefully reported and the reader is helped to understand them by numerous illustrations. We must confess, that to the average medical mind, much of the author's meaning must be obscure. This is due partly to the fact, that the average physician is not used to personally conducting physiological experiments, and also to the fact that we are not zoologists.

The second part of the book which deals with the theory of animal instincts, the relation of heredity to the central nervous system and memory, is extremely interesting and well presented.

His views are his own and he does not hesitate to announce them and defend them. He is not a Darwinian, when he asserts that pain sensations may appear in certain forms of life, without existing even in rudimentary form, in the whole animal kingdom. He combats the idea that consciousness exists in every animal and is present to a certain degree even in the egg. He also emphasises the statement that the idea of a steady, continuous development is inconsistent with the general physical qualities of protoplasm. "The colloidal substances in our protoplasm possess critical points."

By this he means that the colloids change their state very easily; that colloids lend themselves very readily to a discontinuous series of changes. This excludes the Darwinian theory of gradual, steady development. The author has presented his views in an attractive and forceful way, and we bespeak for him a wide reading.

J. W. P.

THE INTERNATIONAL MEDICAL ANNUAL. A year book of treatment and practitioners' index. Thirty-four contributors, American and foreign. Nineteenth year. 1901. Octavo, 682 pages. New York and Chicago: E. B. Treat & Co. 1901. [Price, $3 00.]

The nineteenth annual issue of this popular work is before the profession for its approval and acceptance, and is a worthy successor of a long line of valuable medical contributions. The present volume keeps abreast of the times and some changes are noticed looking toward that end; thus in the department of therapeutics an excellent article is added on toxins and antitoxins, the conjoint work of Professor McFarland, of Philadelphia, and Dr. William Murrell. Another very important chapter is that on the influence of light on the various tissues of the body, also by Dr. Murrell. X-ray work in medicine and surgery is ably handled by Dr. MacIntyre, of Glasgow; Color-blindness, by Dr. Edridge Green, and another special article by Mr. Turner, on Dental and oral surgery. The other departments are up to the usual standard; that on tuberculosis having been undertaken by Professor Puata of the University of Perugia, Italy.

The plates, fourteen in number, have been handsomely executed in colors and add materially to the value of the annual; forty-five wood engravings are interspersed throughout the volume, elucidating the text and simplifying the description of various operative procedures. In appearance the volume is similar to Treat's well-known classics.

W. C. K.

PHYSICAL DIAGNOSIS IN OBSTETRICS A guide in Antepartum, Partum and Postpartum Examinations for the Use of Physicians and Undergraduates. By EDWARD A AYERS, M. D, Professor of Obstetrics in the New York Polyclinic; Attending Physician to the Mothers and Babies Hospital. Octavo, pp. 283. Illustrated. New York: E. B. Treat & Co. 1901. [Price, $2.00.]

The author of this book, who has taught clinical obstetrics for eighteen years, aims to present in book form, more fully and more carefully than can be done in the clinic room, a clinical study of obstetrics, as he has pursued it in giving verbal instruction. How well he has accomplished his purpose only those, perhaps, who listened to him at the bedside can determine; but it is quite true that the teaching of obstetrics has undergone radical changes the past few years, and the author has done well in his attempt to keep literature apace with clinical instruction.

The title of his book is somewhat unique, and appeals to the modern taught obstetrician. Why should not "physical diagnosis," which is so rigidly insisted upon by authors on diseases of the chest, be applied with equal insistence to the phenomena of pregnancy and the parturient? This work is a most useful supplement to the obstetric text-book, it contains much of value that the latter does not, and will assist beginners in obstetric practice to solve many doubtful problems. Moreover, it is essentially a scientific treatise and so will aid the instructor and practitioner in their daily teachings and obstetric work.

EXPERIMENTAL RESEARCH INTO THE SURGERY OF THE RESPIRATORY SYSTEM. An Essay awarded the Nicholas Senn prize by the American Medical Association for 1898. By GEORGE W. CRILE, A.M., M.D. Ph, D., Professor of Clinical Surgery, Western Reserve University; Surgeon to St. Alexis Hospital; Associate Surgeon to Lakeside Hospital, Cleveland. Octavo, pp. 114. Second edition. Philadelphia: J. P. Lippincott Co. 1900.

The author of this essay is a practical surgeon as well as a skilful worker in experimental fields of research. It is quite unusual to find the two elements of science so happily combined. Too often the prize essayist is only a theorist. The researches detailed in this book extended over a period of two years, and were conducted upon dogs. The aim has been to dwell upon the most practical side of the several phases of the subject dealt with, which is a most commendable plan to pursue.

The surgery of the respiratory system is of constantly increasing interest as it becomes better understood, and the work of this author will contribute not a little to a clearer understanding of doubtful points. The effects of inhaling hot air and flame, the cause of collapse or death from blows upon the lower chest and epigastrium, and foreign bodies in the upper-air tract are especially of interest and are well considered. The prize was worthily bestowed and surgeons will eagerly buy the book.

MANUAL OF THE DISEASES OF CHILDREN. By JOHN MADISON TAYLOR, A. M., M. D., Professor of Diseases of Children, Philadelphia Polyclinic; Assistant Physician to the Children's Hospital and to the Orthopedic Hospital; Neurologist to the Howard Hospital, etc. And William H. Wells, M. D., Adjunct Professor of Obstetrics and Diseases of Infancy, Philadelphia Polyclinic; Instructor in Obstetrics in the Jefferson Medical College. Octavo, pp. 859. Illustrated. Second edition, thoroughly revised and enlarged. Philadelphia: P. Blakiston's Son & Co. 1901. [Price, $4.50.]

The second edition of this work is much larger than the first, some chapters having been added outright, the entire volume revised and many minor additions made. Some features deserve special mention. A short chapter on symptomatology and diagnosis is excellent. The chapter on infant feeding has been thoroughly revised. The directions for the home modification of milk give the chapter great practical value, being clear and concise and easy to follow even in a humble home.

Among the new subjects taken up in this edition is a simple practical consideration of diseases of the ear. Every physician who reads it will be glad of the addition. The chapter on the blood has been entirely rewritten and is practically new. The chapter on physical development is a most readable one; especially is that section of it devoted to feebleness in girls at the age of puberty replete with wise counsel.

The American writers on pediatrics have raised a high standard, and this present edition ranks among the best. M. J. F.

RUDIMENTS OF MODERN MEDICAL ELECTRICITY. Arranged in the Form of Questions and Answers. Prepared Especially for Students of Medicine. By S. H. MONELL, M. D., New York, Professor of Static Electricity in the International Correspondence Schools; Founder and Chief Instructor of the New York School of Special Electro-Therapeutics. 12mo. pp. 165. New York: Edward R. Pelton, 19 E. 16th St. 1900. [Price, $1.00.]

There is undoubtedly a demand for such a book as Dr. Monell has attempted to write—one which will present the rudiments of modern medical electricity. Most physicians know far too little of the possibilities of electricity as a therapeutic agent, and next to nothing of its practical application. Dr. Monell is competent to write a book which would supply this confessed need. But why any man fitted to write an instructive volume on any subject should choose to present it in the form of a catechism is past finding out. The book must have great merit which can survive such a style.

M. J. F.

SAUNDERS'S POCKET MEDICAL FORMULARY. With an Appendix. By WILLIAM M. POWELL, M. D., Author of "Essentials of Diseases of Children." Sixth edition, thoroughly revised. Philadelphia: W. B. Saunders & Co. 1900. [Price, $2.00, net.]

That old standby, Saunders's Pocket Medical Formulary, as complete and useful as ever, is out for the sixth time, thoroughly revised. It has a thumb index,blank pages for additional formulæ, diet lists and dose tables, tables of incompatibles, tables of poisons and their antidotes, in short, a thousand and one pieces of useful information which the physician is ashamed not to possess, yet can't for the life of him remember. M. J. F.

BOOKS RECEIVED.

Transactions of the American Dermatological Association. Twenty-fourth annual meeting, held at Washington, D. C., May 1 to 3, 1900, in connection with the Fifth Triennial Congress of American Physicians and Surgeons. Edited by Frank Hugh Montgomery, M. D., Secretary. Chicago: P. F. Pettibone & Co. 1901.

The Medical News Pocket Formulary. New (third) edition. Containing 1700 prescriptions representing the latest and most approved methods of administering remedial agents. By E. Quin Thornton, M. D., Demonstrator of Therapeutics, Pharmacy and Materia Medica in the Jefferson Medical College, Philadelphia. Carefully revised to date of issue. In one wallet-shaped volume, strongly bound in leather, with pocket and pencil. Philadelphia and New York:. Lea Brothers & Co. 1901. [Price, $1.50 net.

Quiz Compends. No. 4. A compend of human physiology. Especially adapted for the use of medical students By Albert P. Brubaker, A. M., M. D., Adjunct Professor of Physiology and Hygiene in the Jefferson Medical College; Professor of Physiology in the Pennsylvania College of Dental Surgery, etc. Tenth edition, revised and enlarged. Philadelphia: P. Blakiston's Son & Co. 1901. [Price, 80 cents.]

Introduction to the Differential Diagnosis of the Separate Forms of Gallstone Disease; based upon his own experience gained in 433 laparatomies for gallstone. By Professor Hans Kehr, Helbersadt. Authorized translation by William Wotkyns Seymour, A. B. (Yale), M. D. (Harvard); formerly Professor of Gynecology in the University of Vermont; Fellow of the American Association of Obstetricians and Gynecologists; Surgeon to the Samaritan Hospital, Troy, N. Y. Octavo, pages 359. Philadelphia: P. Blakiston's Son & Co. 1901. [Price, $2.50.]

Principles of Surgery. By N. Senn, M. D , Ph. D., LL. D., Professor of Surgery in Rush Medical College in Affiliation with the University of Chicago; Professorial Lecturer on Military Surgery in the University of Chicago; Attending Surgeon to the Presbyterian Hospital; Surgeon-in-Chief to St. Joseph's Hospital; Surgeon-General of Illinois. Third edition, thoroughly revised, with 230 wood-engravings, half-tones and colored illustrations Royal octavo, pages, xiv.—700. Philadelphia; F. A. Davis Co. 1901. [Extra cloth, $4.50 net; sheep or half-russia, $5.50 net.]

A Handbook of Materia Medica, Pharmacy and Therapeutics. Including the physiological action of drugs, the special therapeutics of disease, official and practical pharmacy and minute directions for prescription writing. By Samuel O. L. Potter, A. M., M. D., M. R. C. P., Lond.; formerly Professor of the Principles and Practice of Medicine in the Cooper Medical College of San Francisco; Author of the "Quiz Compends of Anatomy and Materia Medica," etc.; late Major and Brigade-Surgeon of Volunteers, U. S. Army. Octavo, pp. 950. Eighth edition, revised and enlarged. Philadelphia: P. Blakiston's Son & Co. 1901. [Price, $5.00.]

A Text-Book of Gynecology. Edited by Charles A. L. Reed, A. M., M. D., President of the American Medical Association (1900-1901); Gynecologist and Clinical Lecturer on Surgical Diseases of Women at the Cincinnati Hospital; Fellow of the American Association of Obstetricians and Gynecologists; Fellow of the British Gynecological Society, etc. Octavo, pp. 925. Illustrated by R. J. Hopkins. New York: D. Appleton & Co. 1901. [Price, $5.00]

Chronic Urethritis of Gonococcic Origin. By J. De Keersmaecker, Chief of Service, Diseases of the Urinary Organs at the Centralklinik of Antwerp; and J. Verhoogen, Agrégé at the University of Brussels; Chief of Service, Diseases of the Urinary Organs at the Polyclinique Libre. Translated and edited with notes by Ludwig Weiss, M. D., Attending Physician to the Genito Urinary and Skin Service, German Poliklinik; Dermatologist to the Hebrew Orphan Asylum, New York, etc. Small octavo, pp. 274. New York: William Wood & Co. 1901.

International Clinics. A Quarterly of Clinical Lectures and Especially Prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Pediatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose and Throat, and other Topics of Interest to Students and Practitioners, by leading members of the Medical Profession throughout the world. Edited by Henry W. Cattell, A. M., M. D., Philadelphia, with the collaboration of John B. Murphy, M. D., of Chicago; Alexander D. Blackader, M. D., of Montreal; H. C. Wood, M. D., of Philadelphia; T. M. Rotch, M. D., of Boston; E Landolt, M. D., of Paris; Thomas G. Morton, M. D., and Charles H. Reed, M. D., of Philadelphia; J. W. Ballantine, M. D , of Edinburgh, and John Harold, M. D. of London, with regular correspondents in Montreal, London, Paris, Leipsic and Vienna. Volume I. Eleventh series. 1901 Philadelphia: J. B. Lippincott Co. 1901.

Lectures on Nasal Obstruction. By A. Marmaduke Shield, M. B. (Camb.) F. R. C. S. (Engl.) Surgeon to St. George's Hospital, London, and Surgeon in charge of the Throat Department, etc. 12mo. illustrated. Philadelphia: P. Blakiston's Son & Co. 1901. [Price, $1.50.]

The Feeding of Infants. Home Guide for Modifying Milk. By Joseph E. Winters, M. D., Professor of Diseases of Children, Cornell University Medical College. New York: E. P. Dutton & Co. 1901. [Price, 50 cents]

Memoranda of Poisons. By Thomas Hawkes Tanner, M. D., F.L.S. Eighth revised edition, by Henry Leffmann, A. M., M. D., Professor of Chemistry in the Woman's Medical College of Pennsylvania, etc. Philadelphia: P. Blakiston's Son & Co. 1901. [Price, 75 cents.]

LITERARY NOTES.

Messrs. G. P. Engelhard & Co., Chicago, who are known as extensive medical publishers, announce the early publication of the Standard Medical Directory containing a complete list, revised to date, of the Physicians of the United States and Canada. Supplementing this important directory will be nine associate directories comprising a full list of all drugs and medicines in use; of hospitals and sanitariums; of medical publications and medical journals; medical officers of the army and navy, and of the marine hospital service; medical colleges and nurses' training schools; national, state, county and local medical societies; medical examining boards and medical laws; state boards of health; and a list of all manufacturers of products related to medicine.

The work will be issued in one volume of about 1,000 imperial octavo pages, printed on good quality of paper and bound in handsome library style. The work of compilation, in which the editors have the coöperation of the officers of the leading medical organisations of the country, is actively in progress and the directory is due to appear about July 15. Prompt responses by physicians to requests for individual data for entries are solicited by the management as a matter of mutual advantage. It is believed this great work will be a contribution of distinct value to the entire profession and its appearance will be awaited with interest.

THE Palisades Manufacturing Company, of Yonkers, has issued a description of the hermetic book of medicine of the ancient Egyptians, which was discovered by George Ebers during his visit to Egypt in 1872. Much of the hieroglyphic writing is reproduced upon an imitation of papyrus. It is an interesting publication and will be sent to any physician on application.

MISCELLANY.

THE ST. PAUL MEETING AND YELLOWSTONE PARK.—Arrangements have been completed for an excursion of the members of the American Medical Association to Yellowstone Park. The committee of arrangements has finally succeeded in pursuading the officials to open up the park a week earlier than usual in order to accommodate the association. A special train will be run from St. Paul to the Yellowstone Park and the railroad officials have promised to do everything in their power to make it satisfactory to all concerned. The rates will be very low, but how low can not at this time be definitely stated.

RUDOLF VIRCHOW FUND.—The following has been sent to the American medical profession: On October 13, 1901, Rudolf Virchow will be 80 years old. When he completed his 70th year, a fund was started in his honor to enable the great master to facilitate scientific research by establishing scholarship, and by encouraging special medical and biological studies. Contributions to that "Rudolf Virchow Fund" were furnished by those in all countries interested in progressive medicine, as a homage to the man whose name is always certain to rouse admiration and enthusiasm.

In Berlin a large committee containing among others the names of A. Bastian, v. Coler, A. Entenburg, B. Fränkel, O. Israel, Fr. König, C. Posner and W. Waldeyer has been formed to call for contributions which are to be added to the original "Rudolf Virchow Fund" so as to increase its efficiency. The committee expresses the opinion that in no better way, and in none more agreeable to the great leader of modern medicine, can his eightieth birthday be celebrated, and ask for the sympathy and coöperation of all those engaged in the study and practice of scientific medicine all over the globe.

The undersigned have formed a sub-committee for the purpose of making the American profession acquainted with the intentions of the Berlin Committee, and urge their colleagues to participate in honoring the very man who has done more, these fifty years, than any other to make medicine a science and international.

Subscriptions should be sent to their secretary, who will receipt therefor.

CHARLES A. L. REED, President of the American Medical Association.
HENRY P. BOWDITCH, President of the Congress of American Physicians and Surgeons.
WILLIAM H. WELCH, Johns Hopkins University.
ROBERT F. WEIR, President of the New York Academy of Medicine.
A. JACOBI, 110 West 34th Street, New York, Secretary.

ITEMS.

MESSRS. WM. R. WARNER & CO., pharmaceutical chemists, of Philadelphia, announce that their business will be continued substantially as it was conducted during the life-time of Mr. Warner, senior, and without interruption. The firm name, William R. Warner & Co., will remain unchanged. The standard of excellence of their products will be scrupulously maintained and all who have had transactions with them can rely upon their statement, that the past will foreshadow the future in every detail.

PHYSICIANS in active practice will be interested in reading the advertisement, on page xxv., relating to Duffy's Malt Whiskey. When alcoholics are needed in the treatment of disease it is of the first importance that they shall be pure. This condition is fully met in the Duffy Malt Whiskey.

WYETH's prepared food, the maker's claim, is not a mere mechanical mixture, the bulk of which is composed of sugar; in fact, it contains no cane sugar, glucose, molasses or sweetener of any kind, its pleasant taste rendering it so acceptable to invalids, infants and others, being derived entirely from the dessicated milk, with its natural sugar of milk, combined with the agreeable odor of the prepared cereals and the sweetness of the extract of malt. They also state that in infant's food it is positively ideal, as more nutritious and at the same time simpler materials for such a food could not, in their judgment, be brought together; and by mixing it with fresh, pure milk, and in some cases a little cream, a most nourishing and powerfully restorative food can be obtained for older children or adults.

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Original Communications.

THE CONSERVATIVE TREATMENT OF INJURIES OF THE EXTREMITIES.[1]

By CHAUNCEY PELTON SMITH, M.D.,

Assistant Surgeon Buffalo General Hospital.

IT GIVES me great pleasure to invite attention to a subject which has interested me greatly, and I trust may interest many of those present—namely, the conservative treatment of injuries which are usually regarded as requiring amputation or resection.

The possibilities of the subject were thrust upon me when in Baltimore. A patient came to the Hopkins Hospital, his finger cut off by some machine, carrying the injured member in a piece of brown paper and asked to have it "stuck on." I paid no attention to what I considered an unreasonable request, until one of the older residents saw the case and after carefully cleansing the stump and finger, which latter was cut off between the second and third joint, sutured the parts with silk, wrapped the wound with collodion and crepe de leisse, and told the patient to come the next day. On inquiry I found that several fingers, where the injury had been caused by edged tools, had been saved by similar means. In consequence much annoyance and regret had been caused, for the reason that patients could not understand why crushed fingers, hands and feet had to be amputated. In all, I saw about four cases treated by this method of deep suture, protection and heat. Out of the four cases one failed to unite. The ultimate results in three were good, as the patients had fair motion besides the cosmetic effect of the hand. Presumably this treatment has been done in Buffalo, but it has never been my good fortune to see it.

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[1] Read before the Section on Surgery, Buffalo Academy of Medicine, February 5, 1901.

I next ask your attention to *compound dislocation of the ankle with or without fracture of the fibula.* These are the cases most commonly treated by amputation or resection. Why? I never have been able to see the point of further injuring an already damaged joint by a resection, nor of removing articular surfaces whose regeneration would fall far short of a normal joint. Even modern text-books on the subject, while they mention the conservative treatment, yet give very full and explicit directions for resection. Many authors speak of drainage tubes passed through the joint, to be removed when the discharge has stopped. I should like to protest most strongly against putting drainage tubes in joints. If you, gentlemen, could but see a joint after a tube has been in a week or so. It was my good fortune to see a pyarthrosis of the knee, which was opened, drained and a half inch rubber tube was passed through laterally. The patient did not do well and the joint was opened for resection. On looking into the joint, one saw a necrotic tunnel in the cartilage of the femur where the drainage-tube had lain and killed the articular cartilage by pressure. It was a condition which I have never forgotten, and if one must drain a joint, simply keep the skin and capsule open with rubber tissue and irrigate. In compound dislocations of the ankle why should we drain? We do it more on authority or habit. As one surgeon said when I asked him in 1893 why he drained clean cases of appendectomy, he replied that he "felt better." For the past five years he no longer drains and presumably feels better yet. The surgical treatment for compound fractures by indirect violence is immediate closure. Why should it not be so for dislocations? Dislocations of the ankle in a large proportion of cases, are caused by indirect violence. Usually the violence is applied at the foot, the body being held rigid, or twisting of the foot. If, then, most of these injuries are caused by indirect violence, the wound is comparatively clean and the tissues uninjured. In all the cases I have seen the joint itself is clean, as the lower end of the tibia in bursting through the capsule and skin receives most of the dirt, and by its position protects the joint proper.

Case I.—J. J. Injured by weight falling on leg; brought to Fitch Hospital; examination revealed a compound dislocation of ankle; under chloroform wound cleansed with salt solution, lower end of tibia scrubbed with the same solution, adjacent parts shaved and cleansed, tibia slipped back in place. Wet bichloride dressing. The patient made an uninterrupted recovery.

Case II.—J. S. Patient struck by foundation stone, causing fall; was brought to the Fitch Hospital. Examination revealed a compound dislocation of ankle with fracture of the fibula, two and one-half inches above the external malleolus, protrusion of the tibia two inches from the wound, the latter being of a "Y" shape. Under chloroform, joint cavity washed with hot salt solution, lower end of the tibia scrubbed with the same solution. Wound trimmed and sutured and joint locked tight. Foot wrapped in hot salt solution and put in forced inversion. After four days, dressing removed, no local or constitutional symptoms of inflammation. Foot and leg put in side splints. Patient removed home eight days following admission. Highest temperature while in the hospital was 101° on the third day. After two weeks I saw the patient, through the courtesy of Dr. Dunham, and leg was put in plaster-of-Paris. At that time motion was possible, being one-third of normal. Observation three months after the injury, motion one-half of normal. Result, poor, if it were a Pott's fracture, but condition ascribed to patient's age, being 62, and general stiffness of the rest of the joints. Four months after injury patient complained of stiffness of joint and pain in walking. Under daily treatment by the Paquelin cautery and hot air, the joint motion improved markedly, the swelling subsided, pain almost disappeared and the motion was restored to one-half of normal.

He was not satisfied with treatment and went to the General Hospital, where he said Dr. Park removed a small piece of bone. I saw him there, but am unable to state what was done. The last observation, about nine months after the injury, patient walked lame, fair motion and could get around without the aid of a stick. Result would be classified as fair. We all have seen similar results from simple Pott's fractures.

Case III.—J. B. Foot caught in an elevator. Brought to the Fitch Hospital. Examination showed a compound dislocation of the ankle outward. Usual treatment of irrigation, cleansing. As I was associated in this case with a physician and he strongly urged drainage, I did as little damage as I could by drainage with a few strands of fine catgut. Wound dressed in four days. Normal. Plaster-of-Paris in eight days, the motion at this time being good. Position of forced inversion. Uninterrupted recovery. Slight temperature for a few days. Functional recovery excellent.

I have presented in some detail the histories of three cases, two of which have excellent functional ankle joints. In one the recovery is only fair, but I have seen the same result following Pott's fracture in the hands of surgeons with the best reputations. If the joints were resected the result, in my opinion, would not be so good, and again there would be some shortening.

I would ask your attention to two cases of pyarthrosis of the knee-joint, a condition for which a large percentage of surgeons would resect.

Case IV.—J. J. *Fractured patella by indirect violence.* Operation twenty-four hours after the injury. Capsule—not bone—sutured with gut. Uninterrupted recovery, until about the fourteenth day, when there were unmistakable signs of pus. I may say here that I have noticed this late suppuration of knee-joints a number of times, and it usually is not accompanied by much local or constitutional symptoms of suppuration. The joint was opened laterally and was washed out with salt solution; no drainage-tube; skin and capsule kept open with accordion pleated rubber tissue. This procedure was continued every other day for twelve days when the suppuration ceased and wounds healed. Patella remained firm throughout the manipulations and bony repair took place. Patient two months afterward had good union and good function of knee-joint.

What would be the present condition if resection were done?

Case V.—T. G. *Fractured patella, wiring, pyarthrosis of knee, necrosis of patella, removal of patella, profuse deep-seated phlegmonous suppuration of thigh and lower leg. Continuous immersion, recovery.* This case was an heirloom from my predecessor at the Fitch. Case first seen May 1, 1900. Was admitted three weeks previously when the wiring was done. May 5, patella became necrotic and was removed. Joint was freely exposed by anterior incision, while multiple incisions were made on the anterior, external, internal, and posterior aspect of the thigh, as the parts were the seat of profuse deep-seated suppuration. Aggregate length of incisions two feet. Notwithstanding this free drainage, the pus burrowed up the leg and patient would discharge 100-125 c.c. of pus a day. Patient chloroformed and more incisions were made below the knee, as there were evidences of pus burrowing down over and about the tibial head, but with little benefit. Patient's temperature was running 103-105 degrees, and I saw that he would die from sepsis unless radical measures were adopted. Amputation thought unnecessary and doubtful if patient would stand the shock. He was transferred to the General Hospital, where a very light dressing was put over the knee joint, but not over the incisions, and he was immersed in salt solution. A bath tub was half filled and patient placed in it, where he remained for three days and nights, after which time he was allowed from midnight until 6 a.m. in bed, after that time he was placed back in the tub. From the first the patient began to improve and after three weeks of this treatment he was placed in splints and allowed to lie in bed. Recovery slow, but after ten weeks at the hospital he was allowed to go home with a functionally good leg with the exception of a stiff knee. This condition, of course, would be expected following the removal of the patella, pyarthrosis and long continued suppuration.

It may be pertinent to enquire, the value of this procedure, and it can be summed up in the effects of heat and the mechanical effects of fluid. As fast as he made pus, it was washed out by the currents in the water, as every move would set them in motion, and the pus was absorbed by the water and not by the patient. In this case, I doubt if the salt solution was of any value as it was in a short time changed into unknown chemical compounds. But there is no question in my mind that the immersion not only saved the limb, but also the life of the patient.

Case VI.—J. S. *Lacerated wound of the index finger, infection, suppuration, threatened gangrene, immersion, recovery; anchylosis.* Patient a machinist by occupation, hence all fingers quite important; received a lacerated wound which became infected. I treated him without much benefit for two weeks as the phlegmonous inflammation not only persisted, but spread. Incision. Dressing two days afterward and the end of the index finger down to the second joint was a dark brown color; in fact, I thought that gangrene had set in. Continuous immersion ordered and given for twelve hours. At the end of this time, I saw him and the finger which was a brownish black had changed to a rosy pink. Immersion continued. Uninterrupted recovery. Anchylosis of the distal joint.

The foregoing case illustrates the benefits of continuous immersion and its results. When the finger was on the border line of gangrene, I know of nothing except immersion which would bring it back to normal. Wet bichloride or a dry dressing would have killed it. In the majority of cases the finger would have been amputated.

Case VII.—J. S. *Compound fracture of femur, lower third,* (railroad crush). Patient admitted 3 a.m. and was seen by me a short time afterward. Examination showed a compound comminuted fracture of the femur with extensive laceration of tissue down to the bone. A flat car was said to have passed over the leg. I suggested amputation, but the patient was unwilling until his friends could be communicated with. Saw patient at 9.30 a.m. the following day and on closer examination found his femoral artery uninjured. How it escaped I do not pretend to say. An idea occurred to me following out a writer in the Annals of Surgery, who in a case of mangle injury crushing the radius, resected the ulna to an equal extent of bone lost in the radius; the ends were approximated, which made a "U" shaped mass of the tissues on the ulnar side of the arm, which carried the vessels. Several months afterward when union had taken place, he cut this "U" off, leaving a functionally useful arm with flexion and extension of the fingers, the arm being shortened by three inches. With this procedure in mind, I cut away all the extensor, abductor and adductor muscles down to the bone and trimmed away all the tissue necrotic by pressure. The femur was resected for three inches and the ends approximated and sutured with heavy silver wire. When the ends of the bones were approximated the muscles needed to be trimmed, so as to get better union and when this was finished the leg had a diameter of the midthigh. The femoral artery was exposed for a distance of three inches, and I was careful not to twist or compress it when approximating the soft tissues. Wound closed without drainage. Patient recovered from chloroform, talked to his friends and with me. Was in excellent condition until 7 p.m. when he suddenly died. Cause unknown.

I was satisfied from the work done that the man would eventually have a functionally good leg with knee and ankle joint motion. Hereafter I will not amputate in similar cases, as I believe while this case had an unfortunate termination, yet the principle is worth trying for.

Case VIII.—*Compound comminuted fracture of the bones of the carpus, lacerated wound of the wrist, compound fracture of ulna, suturing wound, wiring bone, immersion, recovery.* Patient was bitten by a bear, receiving a lacerated wound of the wrist and a compound comminuted fracture of two bones of the carpus, ulnar side. Joint laid open and hand disarticulated. Hand was held to forearm by the extensors of the thumb (ext. ossis metacarpi pollicis, ext primi internodii pollicis, ext. secondi internodii pollicis) blood supply, the radial artery. Patient also had a compound fracture of the ulna, which does not concern us, except as a complication, and which may be disposed of by saying that the bone was wired; union perfect; wire still in. Patient had been seen by two or more physicians who said that the hand would have to come off. Saw patient two hours after the injury and was inclined to think that amputation would be necessary owing to the extent of the laceration of the wrist. On examination, radial artery was found to be intact, so after explaining to the patient that failure might result, the arm was treated conservatively. Small fragments of bone were removed, tendons trimmed and joined, hand sewed back in position, and wound closed without drainage. Continuous immersion for seventeen days. Patient was seen twenty-four hours after the injury and the condition was excellent; hands warm, finger nails rosy. Patient was left in the care of Dr. Gerber, who followed the conservative treatment and took most excellent care of the man. Recovery slow, owing to long-continued suppuration about the dorsum of the hand and wrist, which burrowed in several directions. The abscess was freely opened and finally all sinuses were healed. Anchylosis was broken up several times under chloroform, but without much permanent benefit with the exception of improvement of motion in fingers. Patient discharged four months after injury.

Present condition. Practically complete anchylosis of wrist. Abduction and adduction of the thumb and fingers one half of normal, which permits patient to grasp and hold objects between thumb and forefinger. Flexion and extension of fingers about fifteen degrees. Hand, as a whole, one-tenth of normal usefulness, but, in my judgment, far better than an artificial member aside from the cosmetic and mental effect of possession.

In conclusion, I wish to ask a trial for the conservative treatment of the class of injuries, to which I have alluded, and also to thank you for your attention this evening.

90 N. PEARL ST.

SKIN GRAFTING.[1]

By F. B. RASBACH. M. D., Buffalo, N. Y.

IN retrospecting the advancement in surgical science—both in application and technique—in the latter half of the nineteenth century, one must surely recall that of skin grafting, and those of us in Buffalo should be duly mindful of this simple, though extremely useful operation; for it was at the Sisters' Hospital, in this city, that the first successful attempt of skin transportation was made.

With your indulgence it may be profitable to here review the history of skin grafting, watching its various steps, and the changes it has passed through. History, and especially medical history tell us that during the Grecian and Roman wars medical men of these early times replaced by careful adjustment severed noses, fingers and ears successfully establishing the continuity of these injured members for their cosmetic effect, if not for their usefulness. Over a century ago John Hunter of England succeeded in transplanting a spur from a cock's leg into the comb of a second fowl and found that it not only lived but grew.

In 1847, Frank Hastings Hamilton, in his clinic at Geneva, N.Y., offered to a patient with an ulcer of the leg, which was exceedingly troublesome in healing, the advantages of an operation whereby he was to take the skin from the opposite leg and transplant it to the seat of the ulcer of the affected leg. This operation, however, was refused, but in 1854, seven years later, in the Sisters' hospital in this city, he put his ideas into practice by an operation on Horace Driscoll, by transporting a piece of skin of his left leg to an ulcer of his right leg, which he reported in December of that year in *Buffalo Medical Monthly Reporter*, now the BUFFALO MEDICAL JOURNAL.[2] This is the first successful attempt at skin grafting recorded. This operation was accomplished by dissecting a large piece of skin, 7x4 inches, from the selected site, taking all its layers down to the fascia, but leaving a nutritive pedicle or base. Between the skin and fascia he interposed a piece of lint, to prevent its uniting with the surface from which it had been lifted. Two weeks afterwards, when granulations had formed on the cut surface, he prepared the ulcer of the right leg for the reception of the flap by dissecting out the granulations and part of the cicatrix, forming a deep bed, into which he inserted the flap after removing the granulations from its under surface. The legs were then fastened together, and two weeks later, making four weeks in all, the pedicle or base was separated from the left leg the flap having united throughout most of its edge and under surface. By this operation he taught these principles, that the skin grew from the graft as well as from the margin of the ulcer and that the graft stimulated the margin to proliferate.

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[1] Read before Buffalo Medical Union, November 28, 1900.

[2] The full title of this journal at that time was: *Buffalo Medical Journal and Monthly Review of Medical and Surgical Sciences*.—EDITOR.

In 1869, Reverdin, an interné in Charity Hospital, Paris, reported in December of that year a case he had successfully operated upon by the following method, which is to use minute pieces of the outer layers of healthy skin; the pieces removed should only be the size of the head of an ordinary pin and only the epidermic layer should be taken; the cut surface should not bleed. The rete-Malpighii is the layer sought for application to the granulations. These grafts are placed about one-fourth of an inch from the margin on the ulcer, and at an equal distance from each other.

In 1880, Fisher, of Strassburg, devised a method somewhat resembling Hamilton's, only the grafts were entirely detached and both ulcer and site from which the skin sections were to be taken, were rendered bloodless (ischemic) immediately before the grafts were cut, by an Esmarch or an elastic bandage, and the grafts were applied immediately to the ulcer, which had been duly prepared. He found that ulcers treated by this method could be completely covered by pieces of skin of almost any size, and that the ulcer healed with little or no secretion; the dissolution and decomposition of the external layers of the grafts did not take place and the wound remained dry. This method is most feasible in hospitals where amputations are performed, the severed members being utilised to furnish the grafts.

Then followed Thiersch, in 1886, whose method is now so universally used because of its uniformly good results and its simplicity, and the fact that in most cases the patient himself can furnish the grafts and without producing a second ulcerating surface. In this method grafts are only cut through the papillary layer, and it is based on the viability of the superficial layers of skin when entirely removed from their original source of nutrition, and their tendency to form permanent attachments to a denuded surface. In the technique of the operation he follows Lister's principles of strict asepsis, both of the ulcer and of the site from which the grafts are taken, which are preferable from the thigh, leg, or arm, and whichever site is selected it is wise to shave, wash and leave in aseptic dressings at least twenty-four hours before the operation, preparing the ulcer at the same time, which should have healthy granulations. It has been my custom for some days previous to the operation to use as a wash for the ulcer a two per cent. zinc sulphate solution and a gauze dressing mounted in the same solution, which stimulates the ulcer and cuts down the exuberant granulations, making a good bed for the reception of the grafts, relieving the necessity of curretting, and subsequent hemorrhage at the time of the operation.

The grafts should be thin, long ribbons, taking just the epidermic layers, and the site from which they are taken should not bleed; use a razor, held nearly parallel with the surface to be cut, and during the cutting, which is done by a sawing motion, keep dripping on the razor a 2 per cent. salt solution, from gauze soaked therein, which assists the cutting by keeping the grafts from sticking and curling on the razor.

Dr. Weir, of New York, has devised some hooks to keep the skin taut, so as to cut larger, *i. e.*, wider and longer strips. I find by taking a thin piece of wood and some small tacks, upholster or gimp tacks, and driving them through the wood so that they just protrude, one can make a rake, easily sterilised, which answers all purposes. The grafts should be applied immediately to the ulcer, pressed gently but firmly down and when the ulcer is entirely covered, apply strips of gutta-percha protective, one over-lapping the other. Next, gauze soaked in salt solution and, outside of abundant gauze dressing, a sheet of gutta-percha protective, to keep the dressings moist, which should be moistened with the salt solution from time to time until the third day, when the first dressing is made. Care should be taken not to disturb the grafts, but if any secretion is present, gently loosen and float the gutta-percha tissue strips free, and wash thoroughly with the salt solution.

The grafts may take en masse, or at the end of a week or ten days look as if they were loosened and macerated and wash off easily. Do not rub them off in despair. Keep up the gentle washings and same precaution in dressing, and in a few days the field will be studded with little white spots; these are little islands composed of epithelium cells and they will proliferate quite rapidly, and though the granulations become exuberant between them, they spread out until they become attached to their neighbors, and in the end will choke or strangle these granulations in their meshes. The surgeon can again assist nature by clipping these high points of strangulating granulations, stopping hemorrhage by a point of silver nitrate, and in a short time the surface will be covered with a thin layer of skin. This needs protection for a time and by the application of some emollient it will thicken somewhat. However, it will never become as tough as natural derma; no hair will grow on it, and no sweat or sebaceous matter come from it, and little or no superficial fascia form beneath to cushion it, though its attachment will be firm. Therefore it is not applicable to places needing resistance to great pressure, as palms of hands or soles of feet. These varieties need to be grafted by Wolf's method, or if on the hand by the "hip pocket method," which I will not here describe.

Following Thiersch and adopting his technique to a greater or less extent, different operators began using the skin of animals, such as pig, dog, rabbit and frog, and though there are many reported successes, they are not as satisfactory as Thiersch's method, but have some utility when very large surfaces are to be covered.

At the meeting of the New York State Medical Society, in 1895, Dr. Lusk, of Warsaw, read a paper, detailing a method he had used in a case of extensive burn. Using some of the exfoliated epithelium, the result of vesication, that had been separated from its normal attachments for five weeks,he softened it in warm boric acid solutions, and used small pieces, *i. e.*, making twelve grafts from a piece an inch square, and seven of the twelve took. He believes that if these pieces are kept at a proper temperature, 40 to 90° F., they will keep almost indefinitely. He has since extended the practice by raising a blister with cantharides using the exfoliated epithelium, and he reports this method very successful, there being a marked absence of cicatricial contraction and scar tissue is firm and well nourished.

Amat, in 1895, reported using the lining membrane from shell of an egg for grafting extensive burns, and reports favorably of the method in this class of cases.

It has not been my privilege to try all these methods, in fact, I can only speak by experience of two—Reverdin and Thiersch—and I consider the latter the better.

Within the last three months, I had an opportunity of using conservative surgery on the hand of a young man, which had been crushed and badly lacerated between two rollers in a small printing press. The hand was properly denuded and dressed, and at the end of four weeks there was a large ulcer on the palmar surface, extending from the lower third on the outer side and from the upper third on the inside, down over the wrist. To allow this ulcer to heal by old methods would have caused so much contraction as to impair the usefulness of the hand, but by Thiersch's method the hand is flexible and supple, and leaves the patient able to resume his former position in the shop with no impaired motion.

Thiersch's method has been a balm to the sufferer, and solace to the surgeon, for those cases which in the past could be afforded no relief were an aggravation and an annoyance to the surgeon, can today, by this positive method be relieved and the patients allowed great freedom in following their occupation.

172 ALLEN STREET.

THE MAKING AND FITTING OF SPECTACLES AND EYEGLASSES FROM THE OPTICIAN'S STANDPOINT.[1]

BY P. H. MEYER, Buffalo, N. Y.

THE title, An Optician, suggests to me that it is one which covers a broad field of labor and science, compared with that which it occupied a generation ago. In line with the many discoveries in science, and the great improvements in mechanics, the work of the optician has been divided into many branches, each of which in a comparatively short space of time has developed into practically a science of its own. Among these the ones in which the physician is most actively interested no doubt are microscopy and refraction.

The microscope is the product of the labors of the physician and optician, as also are the ophthalmoscope and spectacle, as they are made today. They were planned and demanded by medical science and urged by the great strides in that study, they were brought to their present state of perfection.

To a person who has given the subject no thought it is probably difficult to realise wherein any great amount of science and mechanical ability are involved in the production of a pair of spectacles. It might be well to explain, at this point, that I do not refer to the glasses manufactured in large quantities and sold over the counters of dry goods and jewelry stores, to people with presbyopia and myopia, many of whom really require the attention of an oculist, and in an endeavor to avoid the supposed unnecessary expense of that course accumulate a small stock of spectacles.

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[1] Read before the Section on Ophthalmology, Otology, Rhinology and Laryngology, Buffalo Academy of Medicine, March 18, 1901.

Many people, if we follow from the beginning of their experience with the wearing of glasses, do so with the idea that a pair of spectacles are what they need to give them relief from headaches, nervousness or some ailment with the eyes themselves. They accordingly visit some store where glasses are sold, and where perhaps a professional looking man will seriously look at their eyes through mysterious looking instruments, and they are subjected to what appears to them a very scientific examination. Of course, they buy a pair of glasses and are confident at the time that they are going to be forever relieved from their ailments. These impressions, however, do not last long, as the course they have taken in the majority of cases of this kind, has a tendency to almost as abruptly lead them to a physician, as though some one had grasped them by the ear and led them to the door of the doctor.

This assertion is proven by the fact that in the course of ten years' observation from the position of a prescription-filling optician, I find that a large percentage of the people from whom I receive prescriptions have in their possession one or several pairs of glasses, which they had purchased from some one and which were not prescribed by a physician. The harm resulting from this course, in the majority of cases, is one of the main roads that lead the subject to the place where medical science is involved in producing spectacles and eyeglasses. Another is by way of the general physician to the eye specialist, and a third that of the patient directly to the oculist.

Prescription in hand they visit the optician. I want to say here that at this stage the most essential part of suiting the patient with glasses is completed. But the question is, do most people, and I might even say physicians and oculists, realise the importance of the correct filling of that prescription, not only in relation to the perfect grinding of the lenses as prescribed, but also to the making of the frame, and adjusting them to the correct position before the eyes?

Here we have a branch of the optical business in which expert mechanism, precision and accuracy can be exercised with much farther reaching results than most persons realise.

Consider that a pair of glasses are carried on the face, that part of us which we most thoroughly shield from unbecoming additions, and that they are worn in connection with that most delicately constructed organ, the eye. Few persons, if any, would wear glasses from choice; if so, no doubt a short period of experimenting would suffice to alter their opinions, especially if they were not perfectly fitted. Glasses on most anyone can be worn with absolute comfort, as they can be so adjusted as to leave the wearer entirely unconscious of them after a comparatively short space of time is allowed, in which to become accustomed to them. Furthermore, when they really conform to and fit the face, they are not detrimental, but in many cases improve the appearance of the wearer.

Probably no one realises as thoroughly as the oculist the importance attached to the position in which lenses are worn before the eyes. When we consider that the nature of the curvature and shapes of lenses are limited to a few—namely, spherical and cylindrical, convex and concave and prismatic, it seems a simple matter to mount and set them on the face. On the other hand, if a prism representing one degree of a circle correctly prescribed, will give a patient relief from headaches, stomach or nervous troubles, will not a prism of similar extent produced by incorrectly adjusted lenses cause the same trouble? And if a difference of five degrees in its axis in a slight cylindrical curved lens will relieve or distress the patient, does this not illustrate the importance of the lenses being set in a correct position?

We all know that no two faces are exactly alike, nor are two noses, consequently no two pairs of glasses dare be alike, if they fit perfectly. Does this not represent a field in itself for the practice of accuracy in mechanics?

Recently a nearsighted man said to me, "A few years ago I used to go into a store and fit myself out of a tray of glasses and now since doctors and opticians do my fitting, I am entirely dependent upon them for comfort." Upon asking him if he would like to go back to the old method he said, "no indeed, not I." That same gentleman visits the optician not less than once a month to have his glasses adjusted.

As an example, allow me to follow him a little farther; he has an inclination to hold his head a trifle higher than most persons, which fact was overlooked in the fitting of his glasses. This, of course, gave him a tendancy to look a trifle below the center of his lenses most of the time. He complained of headaches and his stomach. The lenses were lowered 1-16 of an inch before his eyes and he was thereby relieved. The change in the position of the lenses obviated the effect of one degree of prism produced by the optical center of his lenses, being set a little higher than the visual plane.

Another case of the importance of accuracy in adjusting lenses before the eyes, is shown in one of a lady who recently traveled one hundred miles to her oculist. She was suffering with headache and her stomach. The prescription which relieved her was this, "reduce the angle of glasses five degrees." The fact that her glasses tilted a few degrees more than they should, no doubt gave the effect of a cylinder in a horizontal meridian, producing an astigmatic effect which she did not naturally have.

In a work on spectaces and eyeglasses by Dr. Phillips, a table is given wherein is shown the additional extent of cylindrical and spherical effects caused by incorrectly adjusted lenses, as cited in the above case.

Any optician engaged in making glasses according to prescriptions, could no doubt cite many cases wherein a difference of a small fraction of an inch in the position of the optical center of lenses before the eyes had given considerable discomfort. Of course there are many wearing glasses, who are not affected by a slight error in adjustment of the lenses, but I find that nearly all and especially those with a stomach or nerve ailment, are hypersensitive in regard to the position of their lenses.

It is a common occurrence to have a busy man or woman, whose glasses have become bent out of shape, leave their work during the rush of business to step into the store of an optician to have them readjusted, and in most cases they are out of line not more than 1-16 or 1-8 of an inch, which is sufficient to make most persons wearing glasses uncomfortable. As a rule, the optician does not charge for this service, which to me is a source of gratification because of these reasons: first, as it is a simple matter for the optician, requiring no further outlay than a moment of his time in its performance; second, for the slight service one is fully recompensed when the person in words and facial expression testifies to instant relief.

This is especially noticeable in the small boy who wears strong lenses, and who has had his frame bent out of its correct shape in a scramble. After readjusting his glasses, to hear him say, "Gee, that's fine." It is an easy matter to feel that he has some change coming to him.

To make glasses so that their frames do not easily bend out of shape and still be delicate in appearance, has been a subject of much study and experimenting on the part of the optician. No metal or other material has proven nearly so satisfactory for this purpose as gold, which after all is the most appropriate to wear on the face. In mechanical manipulation any mechanic of experience in this respect will grant its superiority. It is most cleanly, as it does not tarnish, rust or accumulate verdigris, as do metals sometimes used. It can be most satisfactorily repaired, and as it outlasts several of those made of any other metal used for this purpose, it is most economical.

Next in order to the correct fitting of a pair of glasses, is that they should remain so for as long a time as possible. That they be well made is, of course, essential to their being a perfect fit. The methods of writing measurements of the curvature and axis of lenses, so as to be legible to the physician and optician, have long been standardised. It is only within the last few years that the mountings of glasses have been produced in their present state of mechanical perfection, both in regard to the manner of fitting them before the eyes and the division of the material, so as to give the best results in their use.

Spectacles will probably always be considered the most satisfactory form of mounting lenses, mainly because of their remaining in a more stationary position before the eyes than do nose glasses. The latter style, while greatly improved in its construction during the past few years, is still the same in principle of adherence.

The eye glass for dress is neatest in appearance and most convenient for momentary use, but the spectacle will always be most practical, both in regard to its scientific value and the comfort derived from judicious division of its weight, in adjusting to the nose and ears.

Lens grinding is a branch of spectacle-making in which machinery is made to play an important part; not only is it conducive to labor-saving, but it is also valuable because of its regularity of purpose. However, no machine has been made that is its own master and judge of its work. It is necessary for the prescription optician to employ at least one expert lens-grinder, who in his capacity requires to be an artist in his line, if good results are to be had. To produce a lens with perfect regularity of curvature and entirely free from opacity requires skill and an eye trained by long experience. Since so many lenses are required wherein the optical center is in a different position from that of the geometrical one, as in lenses combined with prisms, the expert lens grinder has grown considerably more necessary than heretofore, where glasses are made according to prescription.

It would require a visit to the optician's workshop to realise the mechanical skill and accuracy exercised in the completing of a well made pair of glasses. Aside from the importance of precision and care necessary in the making of an instrument to be used in connection with the human eye, it is a difficult feature of workmanship to combine metal and glass when neatness and delicacy are required. Everything is made to correspond with measurements, the patient choosing the style of glasses, their face is measured and each part made to conform to the peculiarities of the wearer. Individualism is necessary in perfect fitting glasses. We all have our own faces, so must we all have our own spectacles to be entirely comfortable in using them.

The refractionist well knows the many different grades of lenses, curvatures and combinations that the optician is required to make. While there are not very many kinds of glasses, if we consider their general style only, exact similarity in completed pairs, when actually fitted to the face, are far less common than is sameness in the prescriptions after which the lenses are made.

It is true that only a few years ago when glasses encircled with a rim were most generally used, the sizes of the lens rims were limited to less than half a dozen, but since the event of rimless glasses, there is no limitation to the sizes and shapes lenses are made in their adaption to the face. Even in rimmed glasses, which at this time are used only where durability is necessary, as in cases of small children, there is a considerably larger variety of sizes than were used in former years.

A feature especially noteworthy in our branch of spectacle-making is a class of people who form a majority of those who are our patrons. The fact that errors of refraction in the eyes and muscular irregularities are frequently the cause, or are contributory to the nervous and stomach ailments and headaches, will suggest to you that persons afflicted with this class of difficulties are the most numerous of our patrons.

As to the relation of our work to that of the physician, in comparison, our business and that of the druggist are more nearly similar than any other mercantile line. It, however, greatly differs in that we deal directly with the principle, while the druggist successfully fills prescriptions without a visit from the patient.

Of course, spectacle-making is a mechanical vocation in every sense, but spectacle-selling is not, and in this respect I do not know just what mercantile line of business with which to compare the optician's work. I think almost every merchant could recall instances of dealing with a customer, who would not be suited, regardless of every thing that he could do for them. As they leave his store he will content himself with the thought that the person was a crank.

I by no means believe the optician's customers to be cranks in the sense with which the dictionary defines the word, but I do believe that in general they are a different class from those with which other merchants do business.

If we could imbibe into a model storekeeper a thorough knowledge of spectacle-fitting without that of spectacle-selling, and place him suddenly in an optician's store, he would probably believe that most of his customers where whimsical. By this I mean to illustrate that the spectacle-making optician requires, in order to be successful, a certain different sort of mercantile training from any other class of storekeeper, which only years of experience in this branch of business will develop.

Fortunately for the optician, some oculists instruct their patients in some cases as to the style of glasses he wishes them to wear. Especially when spectacles are to be worn when nose glasses are preferred by the patient is this fortunate, as it is a difficult matter to make such persons understand that spectacles are what they ought to wear. Between himself and the patient the physician undoubtedly is master of the situation while relatively the optician is not always.

There are quite a variety of styles and shapes of glasses made, and as in any article of this nature only one kind is the best suited to each case. The optician is expected to know which is that best kind and if it does not at the time suit the cosmetic taste of the patient, the well-trained optician will overcome the situation by the customers' having that which is best for them and, of course, with perfect work always resulting in the retention of the person's good-will. There is no class of patrons that a first-class optician would rather deal with than those who have previously been ill-fitted. No one except those who wear glasses can realise what a continuous source of discomfort an incorrectly fitted pair of glasses are. I believe most persons perfectly fitted with glasses do not forget the optician who made them. This fact coupled with the appreciation of the successful oculist, of perfection in this class of work, constitutes the foundation upon which a spectacle-business is established.

I noticed recently in a local Sunday paper an article boldly headed "King of Oculists." It described one of fame in this branch of medical science in Europe. Among others noted, one of the most distinguishing features of this physician's work, was that he always insisted on his patients going to one certain optician in his city for their glasses, and much as was his confidence in this man's ability he always had the patient return with the glasses to him, so that he could be sure that they were perfectly made and adjusted. As exactly the same course of procedure is insisted upon not only by the far-famed oculists of our city but also by some of the locally famous ones, to make this fact noteworthy in our country in the description of a European oculist seems to me far fetched. I, for one, am in a position to know what a superior nature of workmanship in glasses some oculists of Buffalo require in order to bestow their approval.

I believe that no one realises more thoroughly than the leading oculists of our city, how essential a perfectly made and adjusted pair of glasses are to success in the results of their use. The perfect fit is not usually obtained by a haphazard manner of buying nor making them, but by judicious choosing of an optician who will make and fit them according to a plan based on scientific truths—a plan in the following of which the conforming them to the individuality of the face and needs of the wearer has been the main consideration.

A great deal can be said in describing the making of glasses, not only in regard to the grinding of the lenses from the raw material to the completing of the spectacles, and more especially of the mechanical ability required in making the final adjustment in correctly fitting them to the face. But as the physician cannot be much interested in purely mechanical procedures, I have endeavored to remain in the province including the consideration necessary to the successful making and adjusting of glasses. That these are numerous you will grant from your own experiences in your profession, wherein great depth and technicality are involved in everything pertaining to it.

Since the medical profession have interested themselves in spectacles these conditions have at least, in a small degree, blended themselves into the art of spectacle-making. They are an article of which the physician is the architect, and you surely will appreciate that if their correct prescribing requires long years of study in addition to the great problem of medicine, they at least require mechanism of precision in their making. If not I want to say that much of the energy of my business life has been wasted.

THE GENESEE, 532 MAIN STREET.

FRACTURES OF THE NOSE.[1]

By MARSHALL CLINTON, M. D., Buffalo, N. Y.

Attending Surgeon Erie County Hospital, Assistant Attending Surgeon Sisters' and Buffalo Children's Hospitals, Etc.

THE nose, besides being the special organ of the sense of smell, is also one of the organs of facial beauty; the one which of all others detracts from an ideal of facial symmetry when it has suffered injury and deformity.

In the consideration of injuries and deformities a study of the anatomy of the nose is necessary, and we are struck by certain well-known, but none the less, interesting facts. Two-thirds of the facial portion, and one-third of the septum, are made up of cartilage, while the rest is made up of the bony structures forming the nasal, vomer and ethmoid.

The purely disfiguring deformities are found in the cartilaginous framework, which makes up most of the facial portion, and this structure is worthy of some remark. Two lateral, triangular cartilages are found on either side attached to the nasal bones above—the superior maxillæ behind, and to the septum and one from the opposite side in front. The cartilages are rather brittle, thinner in the middle than at their attachments, and united to the bones by connective tissue. This gives us a delicate, yielding framework, solidly attached above and open below. Motion is free in lateral directions, slight in an upward, and less downward, when applied to the tip. When, however, any force is applied to the root very slight motion is permitted in any direction. The delicate way in which the upper lateral and septal cartilages are attached to the contiguous bony parts is of note, for in no other part of the body is found an osteochondral articulation with the edge of the cartilage attached to the bone, with simply the periosteum of the bone serving as the attaching ligaments.

From a cosmetic point of view we can disregard injuries to the bony portion of the nose. There is one anatomical point in connection with the fossæ which is well to remember—namely, the anastomosis of the nasal veins with the veins within the cranium through the cribiform plate of the ethmoid. The lymphatics communicate with the beginning posterior chain of the cervical and retropharyngeal. Any severe force applied to the nose will be transmitted in two directions—down, in which case the force acts on the superior maxilla and vomer; upward, and the force acts on the nasal bones and the ethmoid. The nasal bones being the most prominent, get, therefore, of all the bony structures, the greatest amount of damage to sustain. The ethmoid, while it articulates with thirteen bones, derives its chief support from the sphenoidal and frontal bones. To these, then, are transmitted the force of impact affecting the ethmoid.

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[1] Read before the Section on Ophthalmology, Otology, Rhinology and Laryngology, Buffalo Academy of Medicine, March 18, 1901.

The cause of all fractures of the nose is direct violence. In the analysis of about fifty cases we find that a fracture-dislocation of one of the three main cartilages is the commonest injury. By the main cartilages I mean the septal and two upper lateral. Any force severe enough to flatten the nose will cause the fibrous portions of the cartilages to rupture and a dislocation or dislocation-fracture results. In true fractures of a cartilage, we find an angular deformity, as in green stick fracture of bone and not an over-riding of fragments from muscular pull, as in a complete fracture in bone. The fragments in injury to the lateral cartilages are found to rotate, so that the upper border will be found below the nasal bones, and the lower portion projecting either outward or inward; depending on the direction of the line of fracture. This same deformity occurs in dislocation of the lateral cartilages, and for all practical purposes we can regard them as the same injury. In fracture or dislocation of the septal cartilage, we have a rotation to one side of the superior border and usually a partial fracture of the middle portion, which projects into one of the nasal fossæ. This deformity causes the common twisted nose, as the change in the vertical axis of the septal cartilage changes the direction that the nose points. When the line of fracture in the septal cartilage is through its entire length and the angle is great enough to allow a depression of the upper border, we find a falling in of the two lateral cartilages and a flat nose as a result. This condition is dependent on two conditions, and the proper recognition of the prevailing one is necessary for correct treatment. It may be due to the fracture of the septal cartilage or to a dislocation and rotation downward of both lateral cartilages. Reduction will be much easier in the first instance than in the latter.

Diagnosis—These conditions are usually obscured to a large extent by the large amount of swelling which occurs with slight injury to the external parts of the face, and the patients are none too willing to allow of enough manipulation to discover the exact condition. Swabbing out the nose, after hemorrhage is checked, with a 2 per cent. solution of cocaine is undoubtedly the greatest help we have in arriving at a correct diagnosis. Inspection, both intranasal and extranasal, will tell us a good deal. Taking the root and body of the nose firmly between the fingers will give a sense of unusual motility when a cartilage is out of place, and when fractured the cartilaginous crepitus is quite easily detected. Intranasal inspection will show the septal cartilage bulging into one fossa quite or partly obstructing the nasal fossa. In some cases it is necessary to wait until the swelling has begun to go down before anything can be made out of a case, and here we can leave things alone for three or four days without much harm.

Treatment—When the condition has been recognised, correct it as soon as possible, for permanent deformity may result in dislocations by waiting until new tissue has begun to form between the dislocated borders of a cartilage. In fractures, time is not so essential, as deformity may be corrected almost any time, preferably right after an injury or within three or four days. Any small, smooth instrument in the nature of an elevator will serve to reduce dislocations or fractures of the nasal cartilages, and in their reduction always work from the inside of the nose. In correcting any deformity with an elevator it is best to over-correct, and especially when an external dressing is applied. The rather elaborate adjuvants for the treatment of these conditions, as recommended by some authors, are hardly necessary, for a careful plugging of a nostril with or without an external dressing will hold cartilages in their place. Within a few days after an injury the cartilages will be found to hold in their normal position and, except in the case of young children with downward dislocation and outward rotation of the lateral cartilages, they need only careful watching.

The sequelæ of these conditions when poor results are obtained, are merely a destruction of the symmetry of the nose, which is one of the commonest and most unsightly of cosmetic errors. The size of the nose is of slight importance so long as it is symmetrical.

Fractures of the bony portions of the nose and nasal fossæ present a more serious condition of affairs to deal with. These fractures are usually compound, and being compound deserve the consideration that compound fractures in other portions of the body are granted.

Fractures of the nasal bones are followed by a large amount of swelling and usually by emphysema of the neighboring soft tissues. The hemorrhage is profuse and troublesome at times. The resulting deformity in fractures of the nasal bones can be reduced by external manipulation.

Fractures of the vomer are rare, except in crushing injuries of the face, when they are too minor a thing to consider. Fractures of the ethmoid are more common and fractures of the perpendicular plate are seen in connection with fractures of the nasal bones. They produce no deformity and require treatment only when they give symptoms of obstruction to a fossa. The danger in these conditions is, however, from infection of a virulent type forming a thrombophlebitis which will communicate with the veins which enter the cranium through the cribriform plate. While this condition may be a rare one, yet it should always be guarded against and a case considered to be septic until convalescence is established. Caries of nasal bones, vomer or ethmoid, may result from an injury. One patient under my care last summer presented himself with an extensive periostitis of both superior maxillæ and nasal bones, following the kick of a horse some months previous. The ethmoid may be driven into the anterior fossa of the skull, and this constitutes the severest injury we have to deal with under this heading. I have seen but one case, which I report:

G. F. was struck by a railroad train running at high speed and thrown several yards. He was brought to the hospital, and it being evening at the time he was injured, the ambulance surgeon who first attended him applied bandages and dressings to a bloody face with a hazy idea of what he was dealing with. On entrance to the hospital I found the entire left side of his face turned outward and bandaged over his left ear, with the left nasal bone and left side of his nose and upper lip as the furthermost portion of the flap made by the injury. He was partially conscious and in great pain, so was anesthetised. The vomer was found to be crushed and the perpendicular plate of the ethmoid shattered. On removal of fragments, fractures were seen to extend up to the cribriform plate. Removal of spicules demonstrated the cribriform plate driven into the anterior fossa and pressing on the frontal lobes. I removed enough to admit the tip of the little finger into the anterior fossa of the skull and pulled down the parts driven upward. The whole surface was very carefully cleansed and every bit of dirt and loose particles of bone removed. The cavity, where the left side of the nose ought to have been, was filled with gauze and left in for three days. Fortunately for him, the dural surface healed without infection and after a few days he was convalescent. The cerebral disturbance was marked in the first few days, but his recovery from this rather severe injury was otherwise normal. Two years later I saw this patient, and aside from a deformity due to loss and depression of parts of the left side of his nose, he was all right.

Lacerations associated with fractured noses are at times troublesome to deal with, for no matter how carefully we approximate the wound edges, the motility of the face will allow of enough play on the edges of the wound, to make a broad scar instead of what we would like—a narrow one. Another interesting case of fractured nose was one associated with occlusion of the lachrymal duct. It required patient sounding before the obstruction was overcome, and the patient was instructed in the use of the probe and advised to use it every two weeks for the next six months.

In summing up the whole subject I would say, recognise and treat your deformities as soon after an injury as you can get hold of them, and in correcting them over-correct them for the first few days. By so doing you will avoid many cases of deformed nose, which are not a credit to any medical man called to treat these conditions.

466 Franklin Street.

THE PATHOLOGY OF ASTHMA.[1]

By G. N. JACK, M. D., Depew, N. Y.

IN CONSTRUCTING a pathology for asthma I find it no easy task, for as far as I can ascertain this is the first attempt at venturing so far in the realms of this heretofore mysteriously considered disease. In the spirit of the present age the knowledge of no disease is considered perfect without a well defined pathology, obtained in most cases by a careful post mortem study of the diseased tissues. But the pathology of asthma could never have been discovered nor proven, neither can much light be thrown upon it by post mortem investigations. The pathology of asthma being an abnormal biochemical process, is therefore necessarily destroyed and masked by death. But with our modern, and reasonably accurate methods of studying living tissues and life in its complexity, it is safe and due time to venture the penetration of that halo of mystery hovering around biochemical diseases.

The pathology of asthma, then, is to be learned and studied mostly, and, in many cases, entirely from the living subject. No observer, no matter how acute, could ever hope to discover the pathology of asthma, without first knowing its etiology, symptoms and cure. In other words, the key to the door of the pathological laboratory of asthma was discovered by the light of its etiology, and this etiology was determined largely by a symptomatic and curative process of reasoning. Having determined the etiology, symptoms and cure, the pathology works itself out with a mathemtical exactness which none can dispute nor deny. By this process of reasoning we would have the following algebraic equasion:

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[1] Read before the Section on Pathology, Buffalo Academy of Medicine, April 16, 1901.

Given the etiology, symptoms and cure to find the pathology, we have:

ETIOLOGY.	SYMPTOMS.	CURE.	PATHOLOGY.
Intestinal indigestion and toxemia with its resultant abnormalities of the fluids of the body, especially the blood lymph and chyle.	Dyspnea.	Two and one-half to three years' treatment by a fresh animal and green vegetable diet, with stools and blood as a guide, exercise, cold-water baths, habits, etc.	X

It will be seen, then, that asthma is not a disease by itself having a well-established entity, but that it is only a symptom, a part of a vicious circle, or an abnormal biochemical and complex pathological process, originating usually in the intestinal canal, through a long-standing intestinal indigestion and toxemia, with faulty absorption and metabolism, producing a toxic or lymphagenous chyle that generates an unstable blood, characterised by its extremely varied, numerous and alarming paroxysmal, morphologic changes, often alternating between a lymphocytosis, an intestinal toxemic leucocytosis, or a marked anemia; accompanied anatomically by a hyperplasia of the lymphatic and glandular structures and clinically by a most wretched and agonising dyspnea. This definition makes it plain that the one characteristic pathological feature of asthma is the unstableness of its blood.

During long periods of quiesence the blood of the asthmatic usually presents no demonstrable pathognomonic constituents, but repeated blood analyses during attacks most vividly picture its unstableness. During some attacks the blood will present quite constant pathologic changes, indicating throughout the attacks a decided lymphocytosis, an intestinal toxemic leucocytosis or an anemia, but most frequently we find the blood rapidly oscillating between these three varieties, and occasionally there will be a blending of two of the three abnormalities or of the entire group. In previous papers on this subject read before this Academy, and published in the BUFFALO MEDICAL JOURNAL, February, 1899, and January, 1900, I gave approximately a similar classification of blood abnormalities as the etiology of asthma, although in those classifications I was inclined to believe that that which I have now discovered to be an intestinal toxemic leucocytosis was more of a lymphatic leukemia.

In regard to one of these papers Osler wrote me the following kind and encouraging letter:

"BALTIMORE, January 26, 1900.

"DEAR DR. JACK:

"I was much interested in your paper on the Hygiene of the asthmatic, in which I found many good points. I have never had my attention called to any special relation between leukemia and asthma, and I don't know that the eosinophilia, which is so constant a feature, has any special suggestion in this respect.

Sincerely yours, WILLIAM OSLER."

I should infer from this note that my present classification will still more agreeably accord with Osler's views. Owing to the fact that the three varieties of asthma herein considered so frequently blend, or rapidly alternate, they can hardly be classed as separate pathological conditions, yet as it would be rather confusing to undertake to construct a combined pathology applicable to these manifestations, it is deemed best here to deal with them singly. The nomenclature of the group is taken from the blood dyscrasia most prominent in the production of the asthmatic dyspnea and accordingly are (1) a lymphocytosis; (2) an intestinal toxemic leucocytosis; (3) an anemia.

I. *Asthmatic Lymphocytosis.*—The pathology of this form of asthma lies chiefly in the blood, and in uncomplicated cases there usually is no other appreciable lesion. The asthmatic lymphocytosis is most frequently found in (*a*) children during lactation; (*b*) in asthmatic adults subsisting largely upon a lymphogenous diet.

(*a*) Children of an asthmatic tendency are very apt, especially during lactation, to suddenly develop a lymphocystosis that results in a serious, grave, and often fatal, dyspnea. The attacks usually come on suddenly in the latter part of the night without any prodromal symptoms or exciting causes, other than the lack of the chemical effect of sunlight on the blood. The child may be thrifty, well-nourished, fleshy and rapidly developing, but, as a rule, it is flabby muscled, more or less rhachitic and peevish.

This peevish, irritable, worrisome and changeable disposition, especially pronounced just preceding or during short intervals of attacks, is quite characteristic and offers an excellent clinical demonstration of the unstableness of the blood of the asthmatic. The kidney is the first organ to detect this lymphogenous change in the blood and when this change is gradual, and the kidney normal, it will filter off the excess of lymph almost as fast as it forms, which renders the attacks very mild. The mother will usually observe that the child wets an extraordinary large number of diapers a day or so before an attack. The urine is of a light color, low specific gravity, odorless, neutral in reaction and contains but few solids or crystalline substances. This diuresis diminishes during an attack, to become quite scanty, high colored and highly acid with its cessation. If, with this diuresis a diarrhea mercifully sets in, the excess of lymph will often be drained off sufficiently to completely avert the attack.

The blood analyses are characteristically variable, but the majority will indicate a relative increase in the lymphocytes. Owing to the dilution of the blood by this excessive lymph formation, there is a reduction in the percentage of the hemoglobin, as denoted by the quite constantly lowered specific gravity of the blood. The eosinophiles are decidedly increased in numbers, but still no more so than one would expect in a child, from the malnutrition resulting from a disturbed or perverted metabolism sufficient to produce the lymphocytosis. The most probable cause of this temporary malnutrition and perverted metabolism during lactation is that, from some slight exciting cause, the digestive ferments do not properly act upon the ingested milk which permits the formation of a lymphogenous chyle that, when absorbed by the lacteals and carried to the blood, acts more as a lymphogogue than a true hematogenic substance. The two cardinal factors in the production of the asthmatic dyspnea when due to a lymphocytosis are (1) the hemoglobin cannot reach the oxygen in the lungs; (2) the oxygen cannot reach the lungs.

The hemoglobin is handicapped in reaching the oxygen in the lungs, first, by its being diluted with and thickly surrounded by lymphocytes; and, second by a thickened and air-tight condition of the partition between the oxygen and hemoglobin, due to an accumulation of mucus in the lung substance. The hemoglobin is also often in grave or fatal cases still further excluded from oxygen, by a collateral engorgement of the lung capillaries with lymph. The oxygen is debarred from reaching the lungs by their partially filling with mucus together with the trachea and larynx. In favorable cases, after an hour or so, the pathology changes and the lymph is gotten rid of, by some being metamorphosed into normal blood substance, and the rest by elimination.

A recent case that shows the serious aspect that this variety of asthma is apt to assume, and also serves to clench its pathology, was that of a breast-fed, well nourished, healthy parented, Polish asthmatic child of ten months. It was never entirely free from asthma, but occasionally the attacks would become alarming. In one of these severe paroxysms the respiratory apparatus was so completely filled with mucus, that the most labored respiratory efforts would only allow a discouragingly small amount of air to enter. It is needless to note that this condition was accompanied by cyanosis, lividity, and agonising appeals. Relief, however, was soon obtained by draining the lymph from the blood, and expelling the mucus from the respiratory apparatus. Such heroic measures were resorted to as the administration of a hot saturated solution of epsom salts per stomach until a free emesis was established, a high rectal irrigation with the same solution and followed by holding the child up by the heels, shaking, spanking and tapping on the chest,to aid the expulsion of mucus from the respiratory apparatus.

The blood count showed 93,500 white cells, 70 per cent. of which were lymphocytes. A vast majority of these lymphocytes were small, showing that they had come directly from the lymph channels and the chyle. The child rapidly rallied after this attack, but milk was not allowed for several days on account of its lymphogenous nature, but was substituted by pure blood in the form of bovinine and panopeptone. For the succeeding four weeks the child seemed to thrive and do remarkably well, having only a few milds attacks of asthma. At this period it had another severe attack, like the one above described, in which it died, having no medical assistance, as I arrived only in time to see it expire. A careful post mortem was held, but nothing pathological gained.

The average asthmatic nursling, however, usually presents a somewhat different pathological picture. As a rule, there is a less marked lymphocytosis and more anemia. The lymphocytosis frequently results in adenoids of the nasopharynx, adenolymphoceles, and more or less engorgement and hypertrophy of the lymph spaces of the entire respiratory tract.

(*b*) The asthmatic lymphocytosis of adults, is only seen in asthma of long standing, where the blood has a strong tendency to return to the infantile type, and in cases that have been kept too exclusively upon a lymphogenous diet, as milk, raw eggs, or raw oysters. The lymphocytosis is also induced or augmented by any agent that tends to impair the nutritive value of the plasma. The pathology when occurring in adults does not differ much from that of the infant as above described.

II. *Asthma due to an Intestinal Toxemic Leucocytosis.*—This is by far the most important group. Its pathology begins with the intestinal indigestion and toxemia, which usually continually exists in a variable degree, having, as a rule, a marked exacerbation preceding an attack. This exacerbation in the intestinal toxemia is especially pronounced when preceding an attack following a comparatively long interval of freedom. After the vicious circle of the asthmatic has become established, and the attacks continue or follow at short intervals, the process becomes chronic, and there are only slight exacerbations in the intestinal toxemia.

A case under my present observation has most obviously pictured this vicious circle, and proved its importance in the pathology of asthma.

Male, aged 31; had asthma from infancy to age 10. No asthma from age 10 to age 22. Asthma from age 22 to present. Present attack began last October, after five or six months freedom. All last summer had intestinal indigestion, as manifested by a constant alteration between watery mucus, liquid, fetid, or hard, dry stools, flatulency, and urinary disturbance.

About three weeks before the attack, toxic products were absorbed from the intestinal canal sufficient to produce an enlargement of the numerous glands situated in the larynx and trachea. This glandular enlargement could be detected by the snugness of the collar, and change of voice. The vocal chords also had difficulty in adapting themselves in speech, and would soon become exhausted. The increase in the size of the neck previous to and during the attack was so pronounced that patient was compelled to keep two sets of collars on hand, one size one inch and a half larger than the normal for the asthmatic period.

The blood's faithful guardian, the kidney, was the next organ to become irritated and worried over the blood's dangerous situation, and endeavored to correct matters by the filtering off of as much as possible of the waste material from the already rapidly disintegrating blood. Indican could occasionally be detected, but about the only catobolic evidence in the urine at this stage was its paleness and its excessiveness.

The urine of the asthmatic is as changeable as the unstable blood from which it is filtered. At one urination it may be pale, abundant and of a very low specific gravity, to become in a few hours, especially if following an attack, scanty, high colored, from a disintegration of blood substance, and loaded with uric acid from an increased destruction of leucocytes. The characteristically high acidity of the urine during and following attacks, furnishes another evidence of the blood's diminished alkalinity during attacks. From seven to ten days previous to the attack, the intestinal condition became decidedly toxic; the stools were small, frequent, soft, accompanied by much flatus, and possessed of a nauseating, disgusting, irritating and penetrating odor, that would force the inspector to turn away.

After such an inspection one does not wonder that the blood, a substance essentially sensitive to gases, should rapidly undergo a disintegration from having the field from which it absorbs its sustenance, as the intestinal canal, encompassing such a gaseous toxic material. The stools would change in character from an acid, gaseous, fermenting and irritating condition to an alkaline, putrid, cadaveric and mucous one. This intestinal toxemic condition continued, and during the asthmatic attack with days of improvement, to be followed by an exacerbation.

At the stage of intestinal toxemia, the urine began to show decided evidences of a destructive metamorphosis. It became scanty, exceedingly high colored, of a high specific gravity, and loaded with uric acid. The indicanuria was decidedly augmented.

About twenty-four hours before the attack patient had a severe chill, lasting half an hour; the chill had no febrile reaction, and on the following day the patient felt as well as usual. In the evening, however, his voice had a heavy, congested, bass-like sound, and the collar seemed unusually tight.

For the five months prior to the attack, during which time the patient had no dyspnea, his blood was analysed nearly every third day, owing to the fact that he had been put almost exclusively upon a certain diet (the details of which cannot here be considered) in order to test its efficiency in the treatment of asthma. During most of these blood analyses the patient was in fairly good health and nothing pathological could be demonstrated. Yet, not infrequently, one could detect an appreciable increase in the leucocytes and eosinophiles.

The unstable nature of the blood was often manifested by its tendency to go to extremes in many physiological processes. Thus, the normal leucocytosis of digestion would at times be so greatly exaggerated as to become, for a short time, pathological. The unstableness and extremism of the blood was manifested clinically in the patient by his becoming unnaturally and almost uncontrollably exhilarated under the beneficial influence of sunshine, altitude, or after a cold sponge bath, which was followed by an extreme degree of melancholy under the blood debilitating influence of night darkness, damp, cloudy days, or wet, muddy, swampy districts. The normal drowsiness accompanying the digestion leucocytosis would occasionally be so exaggerated as to require a strong wilful effort to maintain wakefulness. The unstableness of the blood was, of course, directly due to its poorly nourished condition resulting from the intestinal toxemia.

During the stage accompanied by the acid, fermenting, stools, there was a perceptible diminution in the alkalinity of the blood. After the chill the blood began to show pronounced pathological features. The leucocytic count rapidly rose to 61,000, 30 per cent. of which were eosinophiles. After this blood count the on-coming asthmatic attack was positively foretold. This count would rapidly oscillate throughout the attack, but there was constantly and decidedly a pathological leucocytosis.

While it is as yet an undecided question as to the relation that the eosinophiles have to the other white blood corpuscles or their exact significance when occurring in either normal or abnormal numbers in the peripheral blood, nevertheless, occurring, as they do, in such excessive numbers in a condition like this, where the mortality of the leucocytes greatly exceeds their nativity, owing to a toxic and illy nourished condition of the blood, the said toxemia originating from one of the breeding places of the eosinophiles or the intestinal canal, would forcibly indicate that the leucocytes have an eosinophilic origin. This hypothesis would afford two rational explanations for their appearing in such excessive numbers in the blood of the asthmatic. First, that they had migrated into the blood substance to hasten the formation of new leucocytes; and, second, that they had been forced to abandon their normal breeding places in the lymph tissue of the intestinal canal, from its toxic condition. Thus it will be seen, that all of the pathological constituents found in this variety of asthmatic blood are directly due to the rapid completion of the life cycle of the leucocyte, with its consequent pathological representation of all of its life cycle phases, as its origin, existence, death and remains, which would be respectively represented by the eosinophiles, leucocytes, uric acid and possibly Charcot-Leyden crystals.

The dead leucocytes would be represented by those that the blood so rapidly and abundantly casts off through the mucous membranes. During the last stages of the attack the red corpuscles began to be noticeably affected by the toxic plasma, as manifested by their slightly imperfect rouleaux formation.

The dyspnea came on gradually, as it frequently does in the toxic variety after comparatively long periods of freedom. The first respiratory obstruction appeared in the larynx from an enlargement of the glands there situated, the patient experiencing difficulty in expiring the air, and each expiration was accompanied by a loud whistling, wheezing noise, coming directly from the larynx.

In two hours' time there seemed to be almost a complete occlusion of the larynx and asphyxia seemed imminent. A glance at the anatomical structure of the larynx, will readily explain the mechanism of laryngeal dyspnea with its painfully prolonged difficult wheezing expirations.

The ventricular bands or false chords located in the larynx have a valve-like arrangement, said valve having its free edges extending downward in such a manner that the ingress of air would tend to open the valve, and its egress to close it. In normal respirations this valve has no action, but in the pathology of laryngeal dyspnea it plays a very important rôle. The ventricular bands are so thickened and hypertrophied by the accumulation of waste fluids from the rapidly disintegrating blood, in the numerous wide lymph spaces found in them, that they project into the lumen of the larynx far enough to catch sufficient air on expiration to produce a valvular action that nearly closes the air-tube. The process is also aggravated and the ventricular bands pushed farther into the lumen of the larynx by a great engorgement with dead leucocytes, of the many mucous glands located in the ventricles of the larynx and their ascending pouches.

The agony of the patient at this period surpasses description, and one can read the pathology in his very attitude. He stands erect to bring gravity to his aid in lessening the lymph space and glandular engorgement, while tightly grasping some solid object with his hands, to bring in action all of the auxiliary muscles possible to aid in forcing the air out of the lungs. The teeth are set and the sterno-cleido-mastoid muscles of the neck rigid, in their effort to hold the larynx in the most favorable position for the passage of air, but in spite of this attempt at fixation, the larynx is forced up with each expiration and down with each inspiration: the wheezing is confined to the region of the larynx. Each inspiration is begun with a voluntary snuff and jerk in order to lessen the respiratory pause. A voluntary groan is produced on expiration, which presumably helps to prevent the valvular action of the swollen ventricular bands. Phonation is almost impossible, and when forced to talk it seems to exhaust the last bit of air left in the lungs. After about twenty-four hours of that laryngeal dyspnea, the glands underwent a resolution and degeneration, with the expulsion of thick mucus, which was expectorated in lumps the size of a pigeon's egg and of a tough, tenacious, viscid consistency, which gave it an appearance of fat tissue and enabled one to pick it up and handle it about with the fingers.

On inspection it was found to contain several little grayish, pearly balls, which on being unravelled and viewed under the microscope were found to be composed of delicate convoluted spirals (Curschmann's), made up of numerous individual filaments. Other portions of the sputum under the microscope, without staining, were found to contain numerous leucocytes, exhibiting bright, yellowish, coarse granulations; among these were numerous colorless pointed octohedral crystals (Charcot-Leyden's). Disseminated throughout the field were numerous eosinophile granules derived from ruptured eosinophile cells.

Ever since the discovery of spirals in the sputum of the asthmatic by Curschmann it has been a mystery as to their origin, but most authorities believe them to come from the smallest bronchioles. This theory can now be proven erroneous by the fact that they are abundantly found in the sputum coming direct from the larynx, before the process has extended into the bronchioles at all. After the process has extended into the trachea and bronchioles, the sputum first exuded here, also from the involved lymphatic tissue, likewise contains these same spirals, but the fact that they are contained in the sputum coming direct from the larynx before the process has extended beyond that region, proves conclusively that the spirals do not in any case originate in the smallest bronchioles as their casts as heretofore supposed. Where, then, do they originate?

In follicular tonsilitis one often is able to squeeze from the ducts of the inflamed gland perfect casts of these ducts, sometimes one-eighth of an inch long. In laryngeal asthma all of the numerous glands, located in the larynx are engorged to their utmost capacity, with dead leucocytes and this engorgement is maintained, with an increasing pressure by the blood's continuing to dump dead leucocytes there. This pressure causes a plugging of the minute ducts of the small glands with dead leucocytes, until finally the tissue about the duct softens and gives way, which permits the expulsion of the filament-like plug. As these filament-like plugs individually exude from the numerous closely crowded minute ducts, into the lumen of the air-tube, their free ends are caught by the air as it passes out and in and twisted together, making the convoluted spirals. That this is the true origin of these spirals is still further proven by the fact that they are contained only in the mucus first expectorated, which would show that after the glands once softened, and their minute ducts dilated, they expel their contents as fast as formed, without the "duct plugging" or filament formation. The leucocytes, eosinophiles and octohedral crystals found in the sputum, do, of course, come directly from the leucocytic blood. After the softening of the laryngeal glands and the expectoration of their contents, the patient had a few hours of ease with normal respiration, when the dyspnea began again, due to an engorgement of the glands of the trachea and bronchioles. The air would now pass in and out through the larynx freely, and without any wheezing, to meet with obstructions farther down, as indicated by the location of the dry râles and the attitude of the patient. The air now meets with no more obstructions during expiration than it does during inspiration, in which respect it differs from the laryngeal dyspnea. The expirations are, however, here also somewhat prolonged owing wholly to the physiological mechanism of the respiratory muscles. Through the powerful, and if need be, voluntary contraction of the diaphragm an immediate inspiratory force can be produced great enough to rapidly fill the lungs, through a narrowed tube, with a volume of air that will require a painfully long time for the comparatively weak expiratory force to expel.

Owing to the blood's diminished alkalinity together with its leucocytic condition, it is unable to utilise but a small portion of the oxygen that required such a strained muscular effort to furnish, hence the blood reaches the respiratory center in the medulla in a poorly oxygenated condition, which irritates the pneumogastric nerve, thus continually urging the diaphragm on to a still more rapid and strained muscular action, regardless of the quantity of oxygen the lungs may already contain.

In the nonobstructed dyspnea this violent action of the diaphragm will not injure the lung tissue, as enough air will escape with each expiration before the hurried beginning of another inspiration, to prevent their excessive dilatation; but not so where the dyspnea is complicated by an obstruction in the air-tube, for then the normally passive and, when forced by all of its auxiliary muscles, the much weaker expiratory action, will not be permitted time enough, by the agitated diaphragm, to expel more than a part of the inhaled air before the beginning of another forced inspiration which tends to excessively dilate the lungs and produce a temporary emphysematous condition, that if long continued becomes more or less permanent.

The duration of this tubercular obstructed dyspnea was about the same as that of the laryngeal, and it disappeared by the same pathological process, throwing off the same thick, tenacious mucus which, however, seemed to be expectorated in smaller sized lumps. With the beginning of the expectoration a constant cough developed, eliminating in a few hours over a pint of thick, sticky mucus, loaded with the white balls containing the asthma spirals. So thick was this mucus that when its receptacle was jarred the mass would tremble like so much jelly, and when diluted with water and emptied, it would adhere to the sides of its retainer and string down for nearly two feet, and if the vessel were turned back slowly a large amount of the mucus would draw back into it. Mucus of this nature was expectorated for about ten hours, after which the spirals gradually disappeared; with the disappearance of the spirals the expectorations became more profuse; the quantity of mucus expectorated at this period was appalling.

The cough was constant, and each cough usually resulted in the raising of as large a quantity of leucocytes or mucus as could be forced into the mouth. While this pouring out of leucocytes into the air-tubes, with their free expectoration continued without interruption, there was but little if any dyspnea; but if for any reason the blood had its vitality reduced, as it is very apt to do when, for instance, deprived of the chemical and electrical effect of sun or daylight, as in the night, so that it does not readily separate itself from the dead leucocytes, the dyspnea would return, and the expectorations cease or become greatly diminished. A striking proof that the dyspnea at this time was due to an excessively large number of leucocytes in the blood was found in the fact that it would disappear like magic within twenty or thirty minutes after the administration of a large dose of quinine in solution. During the eliminating and expectorating stage, dyspneic spells of this nature would occasionally suddenly develop coming on nearly as often during daylight as night darkness. When coming on in the daytime the dyspnea would usually appear an hour or so after the ingestion of food, or when the digestion leucocytosis was at its height.

Not infrequently, however, quite severe attacks would come on suddenly, and without any warning, while the patient was up and about, due to an accumulation of leucocytes or mucus in the trachea, just as one's nose will become stuffed up with mucus during an acute coryza, sufficient to exclude the entrance of air. Such attacks would usually last for only twenty minutes or an hour, patient experiencing immediate relief with the first expectoration. There was no regularity about the coming of the dyspnea at this stage, sometimes two or three days or nights elapsing without any dyspnea except on exertion. Sleep, however, was almost impossible owing to the incessant cough and free expectoration. In fact, sound, undisturbed slumber was very apt to terminate in a wretched condition, as twice illustrated by this case. On two nights, several days apart, the patient became so exhausted that he dropped into such a sound slumber that the cough center did not respond to the irritation produced by the filtration and accumulation of leucocytes or mucus in the respiratory tubes; for about four hours the filtrated material thus accumulated in the air tubes. When the patient woke it was with a gasp for breath. After a few moments of this truly breathless condition, enough air managed to reach the lungs to produce a cough which soon forced the mucus from the tubes and, with its expulsion, the dyspnea disappeared.

This eliminating and coughing period lasted for about ten days, when it gradually subsided. The patient now began to show possitive signs of malnutrition. He was rapidly losing in weight, his muscles were flabby and he tired very easily on exertion. The diminished alkalinity of blood and scurvy-like condition now manifested itself by producing spongy gums with extravasations of blood and a rapid accumulation of sordes upon the teeth. In about twenty-four hours the process extended to the larynx and, upon hawking, a rusty colored mucus could be raised. From the larynx the process soon extended to the trachea, bronchi and bronchioles, resulting in a frequent cough, that was accompanied by a feeling of soreness in the chest, and the expectorations of a rusty colored sputum, that not infrequently contained streaks of clear blood. When viewed under the microscope, this sputum was found to contain about an equal number of red blood corpuscles, leucocytes and eosinophiles. The expectoration of mucus of this alarming character lasted about five days, and with its cessation the patient rapidly gained in health and vigor which caused him to feel that his troubles for a time, at least, were nearing a close; and so they were, but the blood gave one more beautiful illustration of its diminished alkalinity and infirmity by the production of a purpura, hemorrhagic-like condition, of a patch of skin the size of one's whole hand, located in the right anterior lower portion of the chest.

The patch contained a copious crop of small hemorrhages, the contents of the bulla soon changed to a serum-like substance, which was accompanied by a destruction of the skin, and an intense burning, itching sensation, that soon left a raw surface, which healed very slowly, leaving a scar-like skin that will ever mark its location. A surprising feature about this case is that the patient was not confined to his room one whole day at a time, which thus served to demonstrate the pathology of asthma, when due to an intestinal toxemic leucocytosis, in this convincing and unmistakable manner.

Osler reports a case of asthma in the Johns Hopkins Hospital *Bulletin*, January, 1901, that has many pathological features in common with the case above described. Osler's case was that of a young man, a Pole, who presented the following features: chill, subnormal temperature, cyanosis, extensive purpura, resembling malignant hemorrhagic smallpox, painful muscles, a leucocytosis of 52,000, eosinophiles, 25 per cent. by a differential count. A point to be emphasised in toxemic asthma is that after the toxic leucocytosis, the dead leucocytes are rapidly given up by the blood and, along with other pathological blood constituents, are soon eliminated through the mucous membranes and expelled from the body in one or all of three ways, viz.: expectoration, diarrhea or vomiting.

The special, or if combined principal route of elimination would be determined by both intrinsic and extrinsic etiological factors. The intrinsic factors would be (1) the excessively large number of dead leucocytes and other foreign matter in the blood, together with (2) the essential vital power that the blood has of separating itself from useless material, combined with (3) the fact that the only outlet or "dumping ground" for the blood is the mucous membranes. The extrinsic factors would be (1) the acquired and (2) the induced. Under the acquired we would have habitually an impaired vitality or chronic catarrhal condition of the mucous membrane of the region involved, which would constitute to the blood the line of least resistance, and therefore most naturally its chief "dumping ground." In the asthmatic we find this state of affairs in the mucous membrane of the respiratory tract. That a weakened, chronic catarrhal, mucous membrane, offers the line of least resistance and is taken advantage of by the blood in the expulsion of dead leucocytes and other foreign substances, has been clinically so numerously, vividly and beautifully illustrated that the only strange thing about it is, that more has not been written on the subject.

We continually meet with, especially in early life, cases of so-called "colds" that rapidly alternate with diarrhea. This feature in the pathology of asthma was most convincingly demonstrated by a case of asthma long under my charge, which stated as briefly as possible, is as follows:

Male, aged 70; had asthma from early life until age 65. Paroxysms not very severe, and frequently enjoyed several years of freedom between attacks. Was, however, never entirely free from bronchitis, that was occasionally accompanied by a severe and uncontrollable cough with free expectoration. From 55 to 64 had asthma continually, to such an extent that during these nine years he never attempted to sleep in bed. At about this time had the remainder of a set of decayed teeth removed. Also, at nearly the same period a severe watery putrid diarrhea set in, soon to be followed by a complete abatement of all asthmatic symptoms. The diarrhea becoming alarming, it was checked and the asthma returned, this alternation between diarrhea and asthma was kept up for about a year, when it was decided to leave the diarrhea to nature, and as a result neither the asthma nor the bronchitis ever returned. The diarrhea, though, continued in a very severe form for about three years. At one time it became so alarming as to threaten life. For the last three years he has had about three liquid stools a day. Has gained in weight, and is possessed of an unusual amount of activity, robustness and endurance, for a man of seventy.

The induced or the process of inducing the route of elimination can in many cases of severe paroxysms be most gratefully utilised. Whether it is best in a given case to induce or stimulate elimination to clear the blood, or to diminish the number of leucocytes by the administration of a large dose of quinine in solution, can only be determined by a vast amount of experience and a thorough knowledge of the case.

A few general rules useful as a guide will here be mentioned: (1) if there has been quite a long interval between attacks and the attack was ushered in with three or four weeks' prodomal symptoms, indicating toxemia such as putrid, decomposing or acid fermenting stools, with slow glandular enlargement, indicated in the respiratory apparatus by tight collars, change of voice, and the like, and the blood analysis denoting eosinophiles, lowered specific gravity, diminished alkalinity and a leucocytosis, it would be best to adopt the slower method and, in fact, we would be compelled to, as quinine here is nearly useless, for it would only affect the leucocytosis. The route of elimination here to be chosen would be the bowels. The eliminating agents preferably to be chosen are calomel and soda, followed by a saline purge and later by potassium iodid, which agent would favor oxygenation by increasing the alkalinity of the blood and diminishing the enlarged respiratory glands; (2) elimination through the mucous membrane of the stomach by vomiting or lavage, can but seldom be advantageously utilised. Such a case would be where the stomach is empty, the intestinal toxemia cured or improved, or where there is a slight nausea already existing; (3) elimination through the mucous membrane of the respiratory apparatus by expectoration usually exists, and seldom, if ever, needs inducement or stimulation; (4) in succeeding paroxysms and after the correction of the above mentioned abnormalities as far as possible, by elimination and the like, the pathology of asthma changes and the only etiological lesion is the leucocytosis, which, when once started, is quite apt to persist for a long time. Here the administration of a large dose of quinine in solution will through its leucocytic action have a magic effect.

Toxins producing the asthmatic leucocytosis do not alone originate in the intestinal canal, as for instance the toxin of syphilis often produces a leucocytosis, eosinophilæ and asthma. The eosinophiles in this case would no doubt come largely from the bone-marrow. The prognosis of the toxic group of asthmas is far more grave than that of the other varieties. When unabated by treatment it usually terminates suddenly, in early adult life, with a cerebral hemorrhage. I can now recall two such cases. When abated by treatment it not infrequently grades off with advancing years into the group now to be considered the anemic variety.

3. *Asthma due to Anemia.*—Cases forming this group usually give a history of malarial infection, intestinal indigestion, syphilis, lead poisoning, or asthmatics, who have had the other varieties of asthma in infancy and adult life respectively. But it matters not what the etiological factors might have been, the pathology of this group is short and uncomplicated, as it lies entirely with the blood's inability to absorb or carry a sufficient amount of oxygen. The blood's inability to perform its oxygenating functions properly in the anemia of the asthmatic, is not alone due to a quantitative deficiency in its hemoglobin as in other anemias, but also to the unfavorable hemoglobin environments. Not infrequently the worst stages of a rapidly fatal pernicious anemia will not so greatly cripple the blood's oxygenating power as will a mild anemia, plus the asthmatic peculiarities. There perhaps are other reasons for not more frequently finding a more marked and distressing dyspnea accompanying our grave anemias. One reason for this would be found in the fact that the great majority of cases of pernicious anemia have a relatively high percentage of hemoglobin, due probably to a degeneration and destruction of the cell substance, leaving the hemoglobin in solution.

Cabot gives the following rule: Cases whose color index is low, and in which the average diameter of the red cells is normal are apt to be gaining at that time, while those with high color index are apt to be losing at that time. This nicely explains how a grave anemia might give but little respiratory discomfort, while a mild anemia, under certain circumstances, could produce an agonising dyspnea. The most prominent and constant pathological factors producing the asthmatic dyspnea, when of the anemic variety, are, (1) a deficiency in the hemoglobin and a diminution in corpuscle substance, as appreciated by lack of coloring matter and a lowering of the specific gravity; (2) a quite constant and appreciable diminution in the blood's alkalinity, said normal alkalinity constituting the basic principle of the blood's oxygenation; (3) causes one and two, complicated with a mild leucocytosis, and a slight impairment of rouleaux formation—except when of malarial origin—due to the toxic plasma and its resultant catarrhal condition of the respiratory tract; (4) a diminution in animal magnetism or electricity. It can be quite positively and satisfactorily proven that there is a decided deficency in animal electro-magnetism during an attack of this variety of asthma.

There is no doubt but that the numerous chemical exchanges of life with all its complexity are largely if not entirely dependent upon electrical forces. Therefore, it would appear as a self-evident fact that in such a delicate chemical change as oxygenation, a diminution in this electro-magnetic force would constitute in the asthmatic a pathological feature. The four above-mentioned pathological facts furnish a very perfect picture of the pathology of the anemic variety, and serve also to most beautifully illustrate upon what a delicate scale its pathology is balanced. This delicate balancing of the pathology offers a rational explanation for its pronounced and rapid oscillation up or down for seemingly trivial causes. The pathological division between attacks and freedom is so frail and sensitive to altitude, atmospheric and telluric surroundings, that attacks are immediately brought on or relieved by their changes.

Thus it is that we have an innumerably long list of exciting factors that will bring on attacks and as long a list of curative measures. There is not much of pathological interest about the sputum or urine of the uncomplicated anemic variety. Curschmann's spirals do not so regularly appear in the sputum of the anemic asthmatic, and their appearance in periodically increasing numbers would indicate a complication with a toxic leucocytosis. The only interesting feature about the urine is the rapidity with which it makes such extreme changes both as regards quantity and quality, thus again portraying the blood's unstableness.

Asthmatics whose dyspnea returns night after night, so that they are unable to sleep in bed for years at a time, belong to this class. The vast majority of cases, though, experience periods of freedom under favorable circumstances. The pathology of the different kinds of asthma as here constructed proves positively, conclusively and satisfactorily, that the lungs and nerves take no part in any of the phenomena of asthma, other than the performance of a physiological duty, which is directly contrary to the anciently established neurotic theory that has so unflinchingly withstood the speculations of all past ages.

Clinical Reports.

I.—SEVERE MELANCHOLIA CONSEQUENT UPON PELVIC DISEASE.

By L. G. HANLEY, M. D.,
Gynecologist, Buffalo Hospital of the Sisters of Charity.
Reported by CHAS. WILSON, M. D., Interne.

MRS. B., aged 30, married, was committed to Retreat for Insane, October 30, 1900. Nativity of parents not known; habits, temperate. Was treated for nervous prostration a year and a half before admission. At time of entrance was talkative, excited, and, again, at times quite depressed. Husband stated that she had lost all interest in her household duties, and he frequently found her sitting for hours at a time brooding and quite melancholic. She was treated for two years by her family physician, who advised she be sent to an institution for the cure of the insane. While under treatment at the institution, it was discovered that she was suffering from pelvic disease, and was referred to Doctor Hanley, at the Sisters' of Charity Hospital, December 10, 1900.

History and examination shows that she has had three children, last child born in 1897; labors, hard, and forceps used in each case. Menstruation began at 14 years of age; regular—very little,. pale. Patient also has exophthalmic goitre. Is very melancholic, sometimes refuses to answer when spoken to, and requires constant watching. Complains of pain in lower abdomen, and says she feels worse after treatment. She says that treatments make her worse, and has had pain for four years. During that time she says her doctor treated her for womb trouble, but always felt that she could stand no more treatments, as she expressed it—"they always made her feel worse."

Pelvic examination shows a bilateral laceration of cervix markedly inflamed, with enlargement of both ovaries and tubes, with a complete retroversion. Patient prepared for celiotomy and trachelorraphy. When abdomen was opened, each ovary was found to be about four times its normal size, prolapsed, in a state of cystic degeneration with marked adhesions. Both tubes and ovaries removed; also laceration of cervix repaired. Patient sat up on the twentieth day; union of cervix and abdominal wound perfect. During her stay at the hospital she showed no evidences of mental aberration after the first week. She continued to improve mentally, seemed anxious to return to her home and expressed a desire to be with her husband and her family.

She was discharged January 27, 1901. Information received March 20th from her shows that she is feeling very well, has gained in weight, and says she feels perfectly happy and contented. Evidently this is conclusive proof that her mental psychosis was consequent upon her pelvic disease.

II.—COMPLICATED HYSTERO-MYOMECTOMY.

REPORTED BY CHAS. BANTA, M. D., Interne.

MRS. G., aged 44, admitted to hospital April 29, 1901. No children; age at first menstruation, 13; married; abortion, one twenty years ago. Two years ago patient noticed a swelling in pelvic region, which has been gradually increasing, causing a feeling of heaviness often accompanied by dragging pains, which confined her to her bed. Has had two attacks of peritonitis. Floods profusely at menstrual period, has vertigo and dizziness. Urine diminished in quantity and of high specific gravity. Patient prepared for operation, and abdomen opened through the median line—fibroid, subperitoneal, involving the body of uterus, and growing a little posterior to fundus. The ovary on the right side three times its normal size, attached to which were a number of cysts, the size of English walnut and connected with the ovarian tissue, which was thick and cirrhotic. There was hydrosalpinx of left tube; ovary and tube lying posterior, and bound down to tumor; the sigmoid flexure was adherent, also omentum, showing evidence of severe inflammatory action. Tumor freed from its attachments by ligating either ovarian artery, separating adhesions, when the uterine wall was next treated in same manner, using No. 2, catgut. Cervix left, which was closed and covered with peritoneum. Size of mass, 7 x 5 x 4½ inches; weight, 5 lbs. Wound in abdomen closed with silkworm-gut. Stitches removed on eleventh day; union complete.

HYPERTROPHIC RHINITIS TREATED SUCCESSFULLY WITH ADRENALIN CHLORIDE SOLUTION.

By FRANKLIN W. BOCK, M. D., Dansville, N. Y.

MISS —— came to me suffering from what, at first sight, appeared to be a very aggravated case of coryza; the nose was red and swollen, the nostrils excoriated, the eyes suffused with tears continually. The patient said that for several years she had not been able to breathe through the nose without great effort, and for the last four months she had suffered very much from an increase of the symptoms, being able to breathe through the nose but seldom.

Examination revealed an enormous hypertrophied condition of all the soft tissues of the nose, of a very spongy type, the probe being easily imbedded deeply in the turbinated bodies. I tried a number of remedies without any very good results. Cocaine was not used for good reasons, even to relieve the suffering.

I began the use of adrenalin by making two applications daily, all of the soft tissues of the nose being thoroughly contracted each time. The effect of the first application lasted about two hours. At the time of the second application the swelling did not seem to be quite so marked. I made two applications daily for three days, and then one a day for four days more. Each day the swelling seemed to be permanently less and at the end of the seventh day, the nose was in quite a normal condition; so I discontinued treatment with adrenalin, but kept up the use of ordinary cleansing applications. I had the case under treatment for ten days after the discontinuation of the adrenalin, and at that time the swelling had not returned.

I am also treating acute coryza with greater success than ever before. Everyone knows how hard it is to cleanse a nose which is swollen shut with a bad cold. I have not been able to do it very successfully without the use of cocaine—and that I will not use—until I began to use adrenalin. I now contract the tissues with adrenalin, and then give the nose a good thorough cleaning. The patient is relieved and cured quicker than by any treatment used heretofore.

Society Proceedings.

BUFFALO ACADEMY OF MEDICINE

Section on Ophthalmology, Otology, Rhinology and Laryngology,
March 18, 1901.

REPORTED BY GEORGE F. COTT, M. D., Secretary.

THE seventh meeting of this section was held on Monday, March 18, 1901. Dr. F. WHITEHILL HINKEL in the chair Dr. GEORGE F. COTT, made the following report:

EDEMA OF UVULA.

A recent article in the daily papers which was no doubt read by many physicians has made a wrong impression. The patient, who was aged 50, and under the care of Dr. Chapin, was suffering from chronic Bright's. He was breathing with difficulty. I found great edema of the uvula, which caused loud breathing. The throat was extremely narrow and there was no doubt some edema of the glottis. Heart was very weak and rapid. The patient weighed over 200 pounds. He walked to a couch in another room, where a few drops of a 4 per cent. solution of cocaine were injected under the skin and tracheotomy begun. Just before the trachea was opened, the patient stopped breathing. The windpipe was quickly opened and artificial respiration carried on for three-quarters of an hour, while the patient was put in an inclined plane. Breathing then was again established, but the patient remained quite black and finally died. The cause of death was simply the heart giving out and not due to an operation for quinsy, as has been stated.

Dr. ELMER STARR reported a case of

ANTRAL DISEASE WITH COMPLICATION.

A suppurating antrum had been drained by extracting a tooth and drilling through the upper jaw. The drainage canal was kept open by passing a probe daily; but eventually the pain accompanying this procedure became so great that the patient frequently allowed two or three days to pass without doing it. One morning, after three days had elapsed without the probe having been used, pain from the pent up matter was so great that in desperation the patient took the probe and attempted to introduce it, but the canal was so nearly closed that considerable force was necessary to overcome the resistance. Suddenly the resistance yielded and the probe entered the antrum, and at the same instant, accompanied by a cracking noise, the eyeball protruded between the eyelids, being pushed completely out of its socket. I suppose the antrum was filled with gas under considerable pressure, and that the probe, when it entered the antrum was pushed with force enough to break the floor of the eye. With the aid of a little pressure the eyeball was soon returned to the socket and suffered no permanent injury from the accident.

Mr. P. H. Meyer then read a paper on

THE MAKING AND FITTING OF SPECTACLES AND EYE-GLASSES FROM THE OPTICIAN'S STANDPOINT. (See p. 803.)

DISCUSSION.

Dr. ELMER STARR.—I am glad to have heard Mr. Meyer's paper. We all as medical men can learn something from the optician in the fitting of frames. A dozen or more years ago our patients here were fitted with frames taken from the stock, with little regard for the interpupillary distance, length or curve of templits, or angle at which the lenses were placed. Frequently lenses were decentered in setting them. Now all this is different, thanks to our better opticians, who are doing as good work, I think, as can be found in any part of our country.

All oculists should recognize the importance of correct positions of glasses, and I am glad we have the help of the opticians in this matter. While they are giving us excellent work, I hope they will not be content to stop at this stage, but will soon give us toric and achromatic lenses at less price than they now demand. I have often wished that they might give us more ideal bifocal glasses, in the way of correct tilt or angle of both distance and reading segment.

I wish to thank Mr. Meyer for bringing this important subject before the society.

Dr. A. G. Bennett.—I wish also to thank Mr. Meyer. The oculist and optician have many things in common. The optician has learned many things from the oculist, and the oculist is indebted to the optician for the successful carrying out of his ideas. The dispensing optician holds a very honorable position in society. Of course it is a trade, not a profession, still the dispensing optician is in a position to give sound advice to that class of patients who think that failing vision can always be overcome by the aid of glasses, and by referring such people to a competent oculist may often prevent blindness. I can recall a case of a woman who had glasses adjusted by a quack optician, who, at the time she was fitted was suffering from glaucoma; on the assurance of the optician that it would take some little time to get accustomed to the glasses, she allowed some months to pass before seeking medical aid, by which time vision had almost gone and it required constant attention and energetic treatment to regain even part of the lost vision, and the best obtainable result was only 5-12ths and a very contracted field.

Another case I recall in which a patient suffering from tobacco amblyopia with central scotoma, loss of color sense, and vision reduced to 5-45ths was given a pair of glasses and assured that that was all the treatment he required. In the hands of Mr. Meyer or some other reputable optician, he would not have been given glasses, but would have been advised to seek an oculist's aid. All oculists should support the dispensing optician, as they are a power for good of the country at large.

Dr. **Frank Whitehill Hinkel.**—I speak from the standpoint neither of the oculist nor of the optician, but of the patient. I know from personal experience how trifling a defect in the lens may affect the wearer. I have had lenses ground for my own wear, that apparently neutralised well, but in which I was conscious of discomfort. My first glasses were made and fitted for me in Philadelphia about twenty years ago by the father of Mr. Fox, who is with us this evening. The grinding and fitting was done then more accurately in Philadelphia than anywhere else, and the mechanical skill and ingenuity of the elder Fox had much to do with this enviable reputation of Philadelphia. I can contrast with much pleasure the entire absence of skilful lens-making in Buffalo, when I first came here seventeen years ago, with the high proficiency of that art here today.

Mr. Fox, optician.—It would aid the optician and patient, if the prescription was given to the patient with the advice to use gold frames rather than filled ones, since the latter do not hold the shape, but bend easily. It is, however, sometimes difficult to make a patient believe it. Filled frames are absolutely no good. But words are necessary on the part of the oculist to make the work much easier for the optician.

Mr. Jarvis, optician. —My mind wanders back to Benjamin Franklin, the inventor of the bifocal lens, the remarkable thing to see through a half lens, an upper and lower for reading, which is now greatly improved. I would like to have heard of methods of proposing lens and mounting.

Dr. **Marshall Clinton** then read a paper on

FRACTURE OF THE NOSE. (See p. 811.)

DISCUSSION.

Dr. **Edmond E. Blaauw.**—I think the subject is so limited in experience without fracture of the lower jaw. Dr. Clinton was fortunate to see a few cases. Fractures of the nasal bones are more important than fractures of the nose. We may divide these fractures into two parts. First, the third portion of the nasal bone is fractured and a part of the superior maxillary bone is broken off, and the cartilage of nose is dislocated backward. Other cases are more direct, up higher, and more simple and more serious. The great problem is to dress as soon as possible and thereby prevent the patient from getting shock. It should be dressed within few hours after accident with anesthetic. To dress the cartilage of the septum take little finger and push the septum against opposite side tion of the city's finances, such a system is not likely to be established for some time.

Mr. Millard suggested as another plan that it might be well to give four or five more assistants to the present physical instructors. He asked Dr. Bayliss to outline his suggestion for the introduction of physicians to examine the children so as to determine what course of physical instruction would be best for them to pursue. Dr. Bayliss said his plan was to have a physician at the head of the physical-instruction system and to have a corps of inspectors work under him and follow his instructions.

The teachers of today, Mr. Millard afterward argued, are trying to teach the pupils how to study. He saw good in the board of regents.

Miss Alta J. Wiggins, director of physical culture in the school department, said the work of giving the children physical instruction was important, but practically little is being done in this big field. There is hope that more can be accomplished. There are all sorts of physical effects that retard a child's progress in school, and it would be a good plan to have physicians to whom such cases could be referred. We are not trying to make athletes out of the pupils, but are working to counteract the influence of school study. Bad ventilation is the cause of much trouble. Then, again, the desks—those that are not adjustable desks—are an abomination. They are not suited to the correct sitting posture of a child. A child cannot be comfortable in them, but we are trying to get the children to sit in the proper way in spite of the construction of the desks. Miss Wiggins said the adjustable desks—those that are all right—are vastly in the minority.

Dr. P. W. VanPeyma, chairman of the board of school examiners, followed with an argument on the importance of proper ventilation of the school rooms. The children cannot have good health if they do not have fresh air. It is important also that the rooms be properly lighted. Dr. Van Peyma related an instance where the plans of an architect for an addition to one of the schools made it necessary for the children to sit with their eyes facing the light, which would have been injurious to them. He was surprised at the sweeping statement of Miss Wiggins in reference to the school desks that are not of the kind called adjustable desks. Speaking on physical instruction, he told of the schools of Paris, where, he said, each group of schools has its building especially for use as a gymnasium. Buffalo should have something similar.

Dr. **Henry R. Hopkins**, professor of hygiene, University of Buffalo, said: Physical education is more important to a child than the knowledge of how many rivers empty into the Caspian sea. Too much work is crowded into the present school hours. If two-thirds of it were taken away it would be immensely to the advantage of the pupils. Public playgrounds, public baths and gymnasiums would be good for the children. Exercise out of school would diminish the extraordinary artificial life of the children who cannot leave the crowded houses for the street without being run over. It is not proper that there should be children in the schools who are handicapped by defects that cannot be remedied. Speaking of the ventilation of buildings, Dr. Hopkins suggested that it would be a good thing if the states were to license architects; the state should know something about the intelligence of men in that profession.

Adolph Mier, instructor in the Buffalo gymnasium, followed with an argument showing the importance of physical exercise and of the benefits that eventually result to those who indulge in it. It would be one of the best things in the world for the school children, he said, and its importance should make it obligatory.

The section then adjourned.

Section on Obstetrics and Gynecology, April 23, 1901.

REPORTED BY WILLIAM G. RING, M. D., Secretary.

The regular monthly meeting of this section was held April 23, 1901, at 8.30 p.m., Dr. A. J. **Colton** presiding.

The minutes of the previous meeting were read and approved.

Dr. M. D. **Mann** read a paper on

THE OPERATIVE TREATMENT OF PROLAPSUS UTERI.

DISCUSSION.

Dr. H. E. **Hayd** approved of the method advocated by Dr. Mann, but made further suggestions as to the operative treatment of extreme cases of prolapse. Ventral fixation, next to an Alexander operation, has given me great satisfaction, especially in women who have passed beyond the child-bearing period. Every case must be considered from the point of its pathology.

Dr. J. W. **Grosvenor**.—There is a certain class of cases of prolapse, that is in aged women, which are extremely difficult to treat. Cited two cases in which the prolapse amounted to procidentia. Had tried sponges, India rubber balls, metallic cup and stem, cotton pledgets, all of which were unsuccessful. He would like to ask Dr. Mann what he would do in cases of aged women?

Dr. H. D. INGRAHAM.—It is a more serious condition than Dr. Mann has inferred. I have had many cases and many failures. In women who are pretty well advanced, someone, I do not know who, has suggested putting in two silver wires, through the neck of the uterus (Machinrodt's operation). Denudation of vagina; construction of same, failed. Recommended amputation of the cervix uteri. We should not shorten the posterior wall of vagina. He would not recommend Alexander's operation when women are well along toward menopause, but would use ventral fixation.

Dr. P. W. VAN PEYMA.—In answer to Dr. Grosvenor, I have had some cases in old women. I use cup and stem pessary, with belt and rubber strips externally (McIntosh pessary). Dr. Carl Braun says ventral fixation is a failure.

Dr. M. D. MANN, in closing, and remarking in regard to cases cited by Dr. Grosvenor, related method used in the South during slave days by hammock and white oak bark. Had successfully used Thomas's modification of Cutler's pessary, and it should be used more. He thought the McIntosh pessary an abomination. You cannot do Alexander's operation in moderate cases; it is only part of what should be done—it should be supplemented by Pryor's operation. I do not believe in taking out the uterus in procidentia. The condition is almost an incurable one. I have had poor results in shortening the utero-sacral ligaments. I much prefer Pryor's operation.

The second paper of the evening was read by Dr. J. V. WOODRUFF on

THE CORRECTION OF FACE PRESENTATION.

DISCUSSION.

Dr. P. W. VAN PEYMA.—Many years ago Dr. Hauenstein delivered in the knee chest position. He was much interested in a paper of Dr. Banta's. Cannot say Dr. Woodruff's paper does not appeal to me very much, but advocates deep anesthesia. Any case indicating bringing down the occiput can be done under deep anesthesia. Reynolds's classification cleared up many points in my mind; he divides all cases into four classes, which are treated accordingly.

Dr. LUDWIG SCHROETER.—It seems to me we should make a distinction between cases of normal and flat pelvis. If a normal pelvis, leave it alone and wait. I prefer podalic version for changing the presentation. In impeded cases there is danger of rupture of the uterus. Perforate in eclamptic cases where you cannot wait.

Dr. J. W. GROSVENOR asked if abdominal section was not preferable to perforation?

Dr. JOHN HAUENSTEIN.—I came to hear, not to be heard. It is six years since I practised midwifery. I gave in an address, twenty years ago, my method of procedure. I made cephalic version as soon as the knee-chest position was adopted in this country. Two years ago I explained my plan of cephalic version before this society. I have no cause to change my opinion. Position is one of the most important points in making version without pain and inconvenience to the parturient. I never found it necessary to give chloroform or ether. The head is apt to slip; this can be overcome by making indentation of scalp, and thus bring the vertex down.

Dr. H. D. INGRAHAM.—I have seen two or three cases, but left them alone. I saw Dr. Banta make the change easily. That is my experience.

Dr. M. D. MANN.—All my cases were consultation cases. I believe in replacing the head. I remember a case with Dr. Diehl; it slipped back a dozen times. We made podalic version. It was due to muscular spasm. Another case with Dr. Smith. We got Tarnier forceps in and delivered. Mento-posterior position of head is an impossible position for delivery; it must be replaced. Cesarean section or symphysiotomy could be done. In Dr. Reynolds's third position, let it alone. In the Trendelenburg, we have a valuable position for several conditions. It has great advantages over the knee-chest or perpendicular positions. Deep anesthesia with position is of great advantage.

Dr. ELI H. LONG expressed pleasure of hearing paper, and cited his experience of one face case, and three brow cases; all changed to vertex positions and terminated favorably by forceps delivery. Relies on knee-chest position and version.

Dr. WOODRUFF, in closing, stated that he had used profound anesthesia but failed. Dr. Mann's suggestion of Trendelenburg position on a chair is a good one, but think if good the perpendicular position must be. Have never been to a birth case where there was not any quantity of help. Posture was of great value in the case related by me. Would prefer to perforate instead of a Cesarean section.

Adjourned at 10.25. Present, 25.

MEDICAL SOCIETY OF THE COUNTY OF ERIE.

Reported by FRANKLIN C. GRAM, M. D., Secretary.

THE members of this society were called to attend a special meeting in memory of Dr. Samuel G. Dorr, on April 30, 1901, in the Y. M. C. A. parlors. President William C. Phelps called those assembled to order at 12 m., and announced the object of the meeting.

On motion of Dr. A. H. Briggs, the president appointed a committee consisting of Drs. A. H. Briggs, William Warren Potter and Wm. G. Bissell, to prepare a suitable memorial. The committee presented the following, which was adopted:

IN MEMORIAM.

Samuel Griswold Dorr, M.D., was born at Dansville, N. Y., May 30, 1840, and died at Buffalo, N.Y, April 28, 1901, after an illness of but two hours, of angina pectoris.

Suddenly stricken, while apparently in full vigor and strength of mental and physical manhood, and without the slightest warning, this death has produced a shock to the community, such as seldom before has been experienced.

Dr. Dorr, was known by thousands of persons and was respected and beloved by all. He was an active member of the Medical Society of the County of Erie, one of its most ardent supporters, seldom absent from its meetings and the society through his death has lost a most valuable and respected member.

In view of the fact that the Almighty power has seen fit to take him from our midst,

Be it Resolved, That this society express to the members of the family their sincere sympathy and that the members of the society attend the funeral in a body.

Signed, Albert H. Briggs,
William Warren Potter.
William G. Bissell.

Dr. A. H. Briggs delivered a fitting eulogy on Dr. Dorr, whom he had known throughout his medical career, and with whom he had been intimately associated.

Dr. W. D. Greene said Dr. Dorr was the family physician, friend and counselor, loyal to his friends and never forgot a favor.

Dr. J. J. Birmingham had practised side by side with Dr. Dorr for twenty years and testified to his great popularity in East Buffalo.

Dr. W. C. Phelps said that Dr. Dorr's inventive turn of mind stood him to good advantage in his profession, and mentioned some of the results of such work.

Dr. **William Warren Potter** briefly sketched Dr. Dorr's career since his graduation in medicine. He began his practice as a busy man, an unusual event for a beginner, and remained busy until his end. Later he entered the political field, holding various positions until he became postmaster of Buffalo, and as such was actively engaged at the time of his death. Withal, he was an excellent physician and one of our most respected citizens.

Remarks were also made by Drs. Callanan, Bayliss and Cott, after which the society adjourned.

Abstract.

MEDICAL TREATMENT DURING THE ADOLESCENT PERIOD.

THE adolescent period in the female, says Edwin Rosenthal, Philadelphia (*The Medical Fortnightly*), may be said to be as critical in results as the menopause, and by reason of the methods of our education may be said to be one of the best known conditions universally recognised by the profession and the laity.

Two classes of cases are most numerous: (1) those who have never menstruated, and (2) that class that may have begun, shown a very slight discharge at infrequent intervals, but which has never grown to an extent at any time that may be termed a normal flow.

In all cases of menstrual disorders in the young, the cause must be sought for, and if found corrected. This of certainty directs the treatment. In cases where the menstruation has never appeared, it should always be a certain rule to have the sufferer examined by the mother. In quite a number of instances, anatomical reasons have shown the cause. In four cases an impervious hymen was the cause. In two cases the uterus became the receptacle, and contained the result of numerous menstruations, becoming enlarged even above the pubic bones; the cervix being impervious. In several instances there was an entire absence of the uterus and ovaries. In one case there was an absence of a vagina. Such cases are thus enumerated; nothing can be done in the line of medication, but judicious surgical procedures may in indicated cases effect a cure. Where, however, no anatomical reasons exist, and the patient suffers from suppression of the menstruation, entire or in part, much can be done to aid a cure.

The most common symptom of disordered menstruation is anemia or chlorosis. Anemia alone may be the cause of suppressed menstruation, and while its presence may be looked upon as a certain cause, its treatment is as essential for the appearance of the menstruation as it should be for the general health of the patient.

Besides the condition of the blood as a cause of suppressed menstruation, other well-known conditions equally play a prominent part. Even if the patient should suffer from such diseases—tuberculosis as an example—the presence of a menstrual flow has such an encouraging influence upon the mind of the sufferer, that some attempt should be made to establish it.

Iron is the chief remedy in menstrual disorders, and may be given at all times—before, after and during the flow.

Between the periods I always order the use of iron in three or four daily doses. I have used all forms and varieties, from the tincture of the chloride, which is so often objected to, to the different kinds the pharmacopeia presents, in pill form, as the Blaud pill, simple or modified. My experience brings me back to Gude's pepto-mangan. Gude's pepto-mangan is now the most common in use, and there are so very many similar preparations in the apothecaries that care should be exercised in obtaining the genuine. I have a simple way of distinction. I always order Gude's pepto-mangan given with milk. If the mixture is clean, uncoagulated and palatable, then I know my patient has received what I ordered. For further distinction, I invariably place on my prescription the name "Gude." I order this preparation a teaspoonful in a wineglassful of milk every three or four hours, depending upon the patient's condition.

I have seen such good results in the use of Gude's pepto-mangan in septic diseases, that I have applied it fearlessly in other conditions. None give better promise than those conditions that are coupled with the menstrual flow, especially when seen at the adolescent period.

WEARING OF BELTS AFTER ABDOMINAL SECTION.—Patients who have undergone abdominal section should wear a well-fitting belt for at least two years after the operation, otherwise a hernia is very apt to form. I am aware that more than one distinguished abdominal surgeon has denounced the belt as tending to cause atrophy of the abdominal muscles. Personally, I do not think for one moment that it does; but even if it were so, a somewhat weak abdominal wall is better than a ventral hernia.—Christopher Martin, in *The Scalpel.*

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THE EXPOSITION.

THE Pan-American Exposition was opened in Buffalo, according to schedule, May 1, and was duly dedicated, with all the "pomp and circumstance" due the great occasion, on the 20th day of May, 1901. That such a gigantic undertaking has been planned, constructed, and paid for within a little more than two years, does credit to the men who conceived it, nurtured it, and finally brought it forth in all its Andalusian splendor. Moreover, it is a credit to the good city of Buffalo, that its citizens should have done all this and paid for it out of their own pockets; for it is a well-known fact that there is not a dollar owing as a result of all this outlay, except to the people themselves, who so generously contributed to the capital stock of the company.

It is even a source of comfort, although, perforce, one of disappointment at the time, that the appropriation from congress failed in the closing hours of the session. It has made the exposition self-reliant and independent; whatever it is, it is indebted to no subsidiary aid, but owns itself, so to speak.

Probably no exposition was ever ideally complete at its opening or dedication; probably, likewise, none was ever more so than the Pan-American Exposition of 1901. Whether one looks at it from an engineering, architectural, artistic, business, or pleasure viewpoint, there is little to criticise, but much to praise. In some of its features it is even unique.

One of the most striking points to the stranger is the marvelous color effect that pervades the whole field of vision. Never before has this been applied so effectually or so effectively to buildings of this character. It is this that has so appropriately named the exposition group of buildings, The Rainbow City. Indeed, the coloring is so well done and so exquisitely blended that it even puts the rainbow out of commission as a competitor.

It has been said that in six important features this will surpass all previous expositions ever held: first, in court settings; second, in hydraulic and fountain effects of wonderful beauty and extent; third, in horticultural and floral embellishments; fourth, in color decorations; fifth, in plastic and sculptural decorations; sixth, in electrical effects. Whether this be absolutely true in all respects we know not, but we are quite certain that in all these points no visitor will be disappointed in his expectations. Moreover, in all of them a superior excellence will be found; while in two, color and electrical effects, it is far and away the best that has ever been produced.

As an educator the exposition is in its strongest pose and presents its mightiest appeal to the people, young or old. It is there that art, engineering, landscape and building architecture, machinery, botany, electricity, mechanics and numerous other topics, can be studied at their best advantage, and in this way benefit can be derived of a lasting nature by a visit to its realms. This point is capable of great enlargement had we adequate space at command.

Another essential feature of the exposition is its relation to political economics. It ought to, and no doubt will, prove a bond of stronger union between Mexico, Central and South America, our island possessions and ourselves. Through it may be established a reciprocity in commercial dealings, that ought to benefit all the countries named, and advance the influence of the western hemisphere in the great enterprises of the world. It ought, too, to divert the swarm of young people this way, who have heretofore sought Europe for educational purposes. Our colleges, schools, and shops furnish unexcelled opportunities for academic, professional or artisan training, and, as nearer neighbors to Latin America, we should establish educational relations with it at an early day.

Lastly, the exposition presents amusements for the millions who will visit it, of a most attractive and innocent variety. Its midway is more extensive than any exposition has heretofore presented, and it is free from any objectionable featufes. A visit to the exposition will pay.

RECIPROCITY IN MEDICAL LICENSES AGAIN.

WITH the oncoming of the spring meetings of the several medical bodies that group themselves around the American Medical Association, the question of reciprocity in medical licenses between the states comes up to us with its perennial wellspring of woes and wails. While it is regarded as a desirable condition to reach, we are quite strongly of the opinion that altogether too much importance is given the matter, by those who discuss it simply from a theoretical viewpoint.

It may be a matter of great convenience for the young physician who has obtained permission to practise in Arkansas, to transfer the field of his professional work to New Jersey upon a mere indorsement of his license without undergoing an examination by the board of medical examiners in the latter state. Furthermore, it may be a convenience for the professor in Missouri to remove to New York and begin the practice of medicine without let or hindrance from the laws of the Empire State. These, however, are matters of personal comfort affecting the individuals interested alone, and not at all the medical interests of the commonwealths referred to.

What more particularly concerns the state is, that the men and women licensed to practise medicine shall be amply equipped to do so. Its demands are made with a view to the protection of its citizens from ignorance, incompetency and fraud, and not from any desire to embarrass the citizens of other states who desire to come across its borders to engage in the practice of medicine. If this seems to be a part of its purpose, or if in effect it really proves embarrassing to a few who desire to change residences, this is merely a circumstance that should in nowise affect the general purposes of the practice laws. These statutes have elevated the standard of medical education throughout the United States,—in some states considerably, in others a little,—so that in the aggregate there has been great improvement. No doubt, within the next ten years the gain in this direction will be so great that very little difference will exist between the licensing standards of Arizona and Pennsylvania, or between those of Oregon and Florida; and in this way will come the solution of the reciprocity question, which seems so disturbing to a number of most excellent gentlemen who are discussing it.

We are led to these remarks at this time particularly because of an article lately sent out to the lay press by Dr. Emil Amberg, of Detroit. In his letter of transmittal he says: "Uniform medical legislation is one of the greatest questions before the people of our country at the present time." It seems to us that Dr. Amberg has exaggerated to a considerable degree the so-called importance of interstate reciprocity in medical licenses. In our view, there are a number of questions that should take priority of this one, in the minds of the people of this country at the present moment. However, we are not disposed to enter into captious criticism of the verbiage of

Dr. Amberg's message to the laity, when his intent is so unmistakably and undeniedly good. It is rather with the essence of the question, that the profession of medicine should concern itself in discussing reciprocity in licensure.

We have said before, and we repeat it now, that of far more importance is the establishment of uniform standards of medical education. In other words, equality of standards is the true basis of reciprocity. Our precise words in an address to the Confederation of State Examining Boards were: "The only equitable basis upon which reciprocity can be established, that appears both feasible and practicable, is that of equality of standards for admission to the study and practice of medicine. This implies an equalisation of the preliminary requirements of medical students and a uniformity of applying the tests; a uniform period of collegiate training, including uniformity of methods of teaching; and finally an absolute similarity in the methods of conducting state examinations and granting licenses." Doubtless this idea could be better expressed, but the general principle is as pertinent now as when uttered.

It is of less importance to medical colleges to obtain a division of examinations, than it is to improve their standards of teaching. It is of more consequence to instruct the plastic minds of pupils in a manner so substantial, that they will at least retain the knowledge so imparted long enough to meet the requirements of the state test, without dividing the examinations in order to permit examinations in chemistry, physiology, anatomy and hygiene at the end of two years. In other words, it should be the object of the colleges to teach their students medicine, and not to act as mere preparatory schools for the state examining boards.

The New York *Medical Record* has discussed the question of reciprocity on several occasions with great intelligence and forcefulness. In its issue of March 16, 1901, it states the case so clearly that he who runs may read.

TOM JOHNSON, OF CLEVELAND.

FROM the Cleveland *Plain Dealer*, it is learned that Mayor Johnson places himself on record as not believing in vaccination, and does not believe in "contaminating a man's blood with poison;" that "no doctor would pump the virus into me." He also announces that he will not approve of general or compulsory vaccination. The effect of such rash statements and his attitude toward the present epidemic now prevailing in his city, cannot but be far reaching in its possibility, both on account of his personality and his official position, inasmuch as there are very many who do not understand the reason for, or justification of, sanitary laws and regulations. They see no reason why what was good enough for their fathers and grandfathers before them should not be good enough for them.

When it is considered what vaccination has done for the human race; what the present consensus of opinion of the scientific and medical world is concerning it, it is simply with astonishment that we learn the fact that he is opposed to the progress of civilisation, and much that is conducive to the material and moral welfare of the masses. Mr. Johnson is, without doubt, an aggressive business man, an astute politician, and a strong personality; hence it intensifies our astonishment that he should take such a position and announce such views without first becoming acquainted with the facts, and, more particularly, as it is regarding a matter about which he can have no personal knowledge and surely cannot be informed without much study of the subject.

Were he conversant with the facts, he would surely hesitate long in placing his opinion over against that of unselfish and self-sacrificing medical men and the evidence of history. He assuredly cannot be impressed sufficiently with the fact that this is a terrible thing to be believed. Loose statements about poison contaminating a man, and the like, are much to be regretted. Were he familiar with the simple fact that vaccination does modify or prevent the disease, *i. e.*, has, does, and will check the spread of the malady; and, further, that in his city, according to the reports of the United States Government, from 84 cases on January 18, 1901, the disease has increased to 845 cases by May 17, 1901, which, only in part, represents the number of existing cases, many being concealed and not reported, and had he, upon his inauguration into office, recognised and enforced the methods of sanitary science, Cleveland would not have to its discredit a pestilence that is increasing in extent as shown by the United States Marine Hospital Service reports. This increase has been largely from non-enforcing of protection by vaccination, which dereliction is as inhuman as it is unsanitary.

The Encampment of the Grand Army of the Republic is to be held at Cleveland this summer. It is difficult to suppress something like indignation at his failure to avail himself of and approve every method, and the most important one, in checking this spreading pestilence, and particularly in view of the approaching influx of elderly men—veterans. Every death, from this disease, that has occurred, has been preventable; every new death or case in the absence of vaccination is also preventable; every individual visiting Cleveland and contracting the disease or who may carry the infection away with him to others is unnecessary, and who is responsible? Reflect, Mr. Johnson!

Mayor Johnson, the objections made to vaccination, and the controversies with regard to its efficacy, are matters of common knowledge, but the general result of all scientific inquiries has been to confirm its protective powers. It is a safe and comprehensive procedure. It is in the direction of improved sanitation and an enlightened municipal administration. You cannot afford to commit an act inconsistent with the maintenance of the public health. Educate yourself, in order that you may be capable of comprehending and appreciating its true significance. Do not adopt the professional style of the "antis" by expressing opinion in the daily press suited to the level of the ignorant. Try it, become convinced and see for yourself how quickly and happily it will banish the smallpox pestilence from the shores of your city—now a center of infection that has attracted national attention.

Your extreme ignorance concerning the whole matter, or rather your pretence of knowledge of what is good for the good of the community is to be deprecated. Do not be hostile to the attainment of the truth. Change your false, absurd and dangerous notions; without a change, there can be no advance; do not listen to the ridiculous promises of charlatans, or entertain the injurious influences of the antivaccinationists.

You are an announced reformer—reform! Be advised by your leading medical men who have the courage to advocate and practice their art conscientiously, however opposed by vulgar prepositions and prejudices. Vaccinate! Don't turn your back to the light, but check the development and spread of this most loathsome epidemic by availing yourself of the most important of measures—vaccination.

GOVERNOR ODELL has vetoed all the bills passed by the last legislature granting special privileges to certain persons with reference to entrance into the several professions. These bills were passed in the interest of certain individuals who sought to gain entrance into the learned professions without complying with the requirements now fixed by law. Governor Odell is entitled to the thanks not only of every professional man in the state, but of every other citizen for this wise and beneficent action. His vetoes ought to be taken as a rebuke by every member of the legislature who introduced these measures, or who labored to obtain their enactment.

JUDGE LUMPKIN, of the Superior Court of Georgia, has denied the application for a charter for "The Atlanta Institute of Christian Science," the effect of his decision being that Christian scientists cannot practice their treatment of diseases in the State of Georgia without having been regularly graduated in medicine or passed an examination before the medical examining board, the same as other physicians. Judge Lumpkin holds that, according to the decision of a case in the Supreme Court of Nebraska, Christian science is the practice of medicine, and he further holds that the practice of medicine in Georgia, according to the state law, must be accomplished by persons who are regularly graduated from a medical school.

THE anti-spitting ordinance, which was proposed and pushed to a definite conclusion by Health Commissioner Wende in the face of much opposition, went into effect May 21, 1901. It is a wise measure and will serve to place Buffalo in the first rank with those cities that have adopted similar measures to curtail a filthy and disease-spreading habit.

The *Buffalo Morning Express*, in its issue of May 11, 1901, made the following sensible comments regarding it:

> "Now that the mayor has signed the anti-spitting ordinance, it should be strictly enforced. The ordinance prohibits spitting on the floors of street cars and other public conveyances, and on the floors of stores, factories, theaters and public buildings, and prescribes a fine of not less than $2 or more than $100 for each offense. Sidewalks are excepted from the ordinance, but they should have been included. The ordinance will be published for ten days, after which its enforcement will begin.
>
> "Undoubtedly the enforcement will work some hardship, but that is unavoidable when an attempt is made to break a habit of such long standing. The persons before whom the cases are heard will, of course, discriminate between carelessness and contumacy in the matter of fines, but the quickest way to break up the objectionable practice is to permit no offender to escape without a fine."

PAN-AMERICAN NOTES.

THE PAN-AM. "IS" IN BUFFALO.

JAMES B. PARKE, Jr., in *Buffalo Evening News*, May 1, 1901.

I am
The great
Pan-Am.,
I am,
And I also am
Here to stay
Through May and
Several other moons,
And
I am the Real Goods and
They can't stop me
Though they've tried by
Hurricanes,
Strikes,
Knockers,
Blockers,
And every other
Old thing, and
Even Uncle Sam
Refused me added increment in the way of
A dinky half-million.
But
I am
The Pan-Am.,
Just the same,
And the click of
The gates
Begins this first of
May,
And no other clique
Can say me
Nay,
And
While I am not yet
Dressed up
Fine and dandy
As I will be when
Nature aids me
With flowers,
Just look at
My towers
And domes and
Ask yourself if it
Doesn't pay
To see me even
Négligé.
And then,
When
You've got the lay
Of the land
Come and see me
Every day
When I've got
All my glory
With me.
Why,
At night,
When I'm lit up
I lend light
So the sun
Can borrow
For tomorrow.
I'm the greatest
Sight that
Ever
Came down all the
Highways,
Byways,
Railways
And steamboats
Of this great land.
I am
The great
Pan-Am.,
I am,
Gee-Whiz!
And
I am—because—
I Is!

THE Pan-American Exposition was formally thrown open to the public on May 1st. Its incomplete condition delayed the formal

How well the health of the big fair is safe-guarded may be realised when it is known that during the first days of the exposition Drs. Wilson and Kenerson, under Dr. Park's direction, handled a small epidemic of measles and stamped out the disease without creating a panic. Few people knew that a portion of the midway was under quarantine rule for two weeks.

ONE of the most interesting exhibits is that of municipal sanitation under the charge of Dr. Jacob S. Otto.

BY THE time this issue of the JOURNAL reaches its readers the big fair will be fully completed and in smooth running order. There was much delay in opening some of the midway shows, but all are now completed and in running order.

THE Indian Congress, where are gathered nearly 300 red men and their squaws and papooses, is one of the most interesting exhibits on the midway. The Indians live here as they do on the plains. Their cooking is done over wood fire in the tepees. Among the Navajo tribe personal hygiene is a strong trait. Daily bathing is a fixed rule. Cold water always is used. Even nursing infants are washed this way summer and winter. A six month's old baby is set in a tin basin and cold water poured over it. Another point of personal hygiene, which has become a tribal characteristic of the Navajo's, is ventilation of clothing. Sleeves are never tight, and that portion of the sleeve covering the armpit is never attached to the garment.

BIG LIZ, the Bostock elephant, was the star feature of a surgical clinic at the animal show. A spike was cut out of her foot. Following that operation, there was a dental clinic in which teeth were pulled from hyenas, horses, a lion, and a monkey.

JUST before dedication day, three Polish workmen attempted to drag an electric light wire out of their way in the machinery Building. One was killed, and the others were badly burned about the hands and arms. Since the foregoing was written another fatal electric wire accident has occurred.

ONE of the most beautiful sights of dedication day was the flight of 10,000 carrier pigeons, bearing messages announcing the day's event.

THE Beautiful Orient is a quaint show. It has brought to the exposition all the light and shadow of Cairo and Constantinople, including their people, their customs, their animals and their smells.

The night view of the exposition is a picture of Fairyland with its sharp shadows, its bright lights and its thousands upon thousands of electric lights shining golden against the inky blackness of the night sky.

Dedication day was singularly free from accidents or mishaps, not to say crime. Even pickpockets fared poorly, thanks to the admirable police detective system, and the watchfulness of the exposition guards.

One boy came near to grief, however, at the first bull-fight of the season, held in the Streets of Mexico. Whitney Devitt, 13 years old, wearing a red high school hat, in excitement at seeing the bull jump a six-foot fence to try his horns on a picador, leaped the inside rail and landed nearly in front of his bullship. The bull rushed at him, but Devitt, "he lay low" and the crooked horns of the bull just missed him in the attempt to gore the boy. The astonished bull halted a moment; a Mexican rough rider dashed into the ring, picked Devitt up by his neck and trousers' seat, tossed him over the rail, and the danger was past.

This is the way the boy himself, describes the affair: "When that little brown bull jumped the first fence and started down the narrow alley toward me he scared me, so I didn't know what I was doing," said Devitt. "I hadn't any business inside the second rail. The first bull they fetched on was so lazy I thought it was all a 'skin game,' but when the little brown bull sent the Mexicans over the fence I wanted to get down closer so I could see it. I didn't think such a runt of a bull could jump over the fence, and when I seen him pikin' for me, I made a scramble the wrong way. Gee, t'was excitin', wasn't it? But I don't want any more little red bulls on my plate. He blew right plum in my ear when he went by. Don't tell my mother about it, or I'll get licked."

The Vice-President "did" the midway one day. He met many acquaintances there; for instance, Bostock, the animal man, is an old friend, we almost said. He showed Col. Roosevelt some fine specimens of mountain lions, and several other kinds of the species. Among other incidents of the visit, the Vice-President christened an Indian baby, born on dedication day.

PERSONAL.

Dr. W. Scott Renner, of Buffalo, who has been in Europe for the past three months, has returned and resumed the practice of his specialty, in this city.

Dr. Ralph H. Willse, U. of B., 1900, who served for the past year as house surgeon at the Emergency Hospital, has removed to Westfield, N.Y., to take charge of a private hospital.

Dr. James A. Taggart, of Salamanca, has been elected president of the Medical Society of the County of Cattaraugus. Dr. Taggart is one of the rising physicians in the Southern Tier.

Dr. John H. Pryor, of Buffalo, was appointed by Governor Odell as a delegate to represent the State of New York in the American Congress of Tuberculosis, held at New York City, May 15 and 16, 1901.

Dr. Lorenzo Burrows, Jr., of Buffalo, has been appointed a member of the Buffalo Board of Pension Examining Surgeons, vice Dr. F. W. Abbott, deceased.

Dr. Eli Shriver, Jr., U. of B., 1900, who has served as interne of the Sisters of Charity and Emergency Hospitals, has established offices at 198 Spring Street, Buffalo, for the practice of his profession.

Dr. Charles Ferdinand Durand has removed to "The Bachelor," No. 50 West Chippewa Street.

Dr. Julius Pohlman, of Buffalo, has moved his office and residence from 378 to 404 Franklin Street. Hours: 9 to 1 and 3 to 5.

Dr. John A. Miller, of Buffalo, the official chemist of the Pan-American Exposition, has been appointed state chemist under the department of health. Office and laboratory, 44 and 45 Lewis Block, 13½ East Swan Street.

Dr. William T. Griffin, U. of N., '98, who has served since graduation in the Sisters of Charity and Emergency Hospitals, has established himself in private practice, at 232 Van Rensselaer Street, Buffalo.

Dr. L. J. McAdam, announces the removal of his office to 453 Ellicott Square, Buffalo. His residence is at Eden Center, N.Y., where he has taken charge of the Fairview Sanitarium—an institution for the treatment of tuberculous and syphilitic diseases. Hours at Ellicott Square, 10 to 12 and 2 to 4. Practice limited to surgery and surgical diseases. Telephone, Seneca 1417.

Dr. Frederick Peterson, of New York City, has been appointed by Governor Odell a member of the State Commission in Lunacy to fill the vacancy caused by the removal of Dr. Peter M. Wise. By virtue of the appointment Dr. Peterson becomes president of the commission and his term is for six years. His many Buffalo friends will be very gratified and the appointment is a most excellent one.

Dr. William A. Brady, U. of B., '01, of Canandaigua, has been appointed a member of the medical staff of Erie County Hospital.

Dr. George S. Peck, of Youngstown, O., announces that hereafter his practice will be limited to surgery, gynecology and consultations.

Dr. S. A. Knopf, of New York, read a paper on The Twentieth Century Problems of the Medical Profession and the Treatment of Tuberculosis, before the section on medicine of the Buffalo Academy of Medicine, Tuesday evening, May 14, 1901. Dr. Julius Ullman invited a group of Buffalo physicians to meet Dr. Knopf at dinner at the Castle Inn just before the meeting.

Dr. H. A. Foster, of Buffalo, has returned from California where he and Mrs. Foster have been spending the winter.

Dr. Julius Ullman and **Dr. A. E. Wohnert** have been elected chairman and secretary respectively of the section on medicine of the Buffalo Academy of Medicine.

Dr. B. C. Loveland, of Syracuse, has removed his office and residence from 608 S. Salina Street to Fayette Park, 402 E. Genesee Street. Hours: Until 9 a.m.; 2 to 5 p.m. Evenings by appointment. Telephone, 1727 A.

Dr. Maurice J. Lewi, of New York, secretary of the State Board of Medical Examiners, read a paper at the annual meeting of the Medical Society of the County of Westchester, at White Plains, May 21, 1901, entitled, Some Phases of Medical Legislation.

OBITUARY.

Dr. George C. Jarvis, of Hartford, Conn., died of pneumonia at his home in that city May 7, 1901, aged 67 years. He graduated in arts at Trinity College in 1855, and received his doctorate degree at the University of the City of New York in 1860. He was commissioned as surgeon of the 7th Regiment, Connecticut Volunteers during the civil war and served with credit in that capacity. He was consulting surgeon at the Hartford Hospital and medical director of the Connecticut Mutual Life Insurance Company.

SOCIETY MEETINGS.

THE American Medico-Psychological Association will hold its 57th annual meeting at the Hotel Pfister, Milwaukee, June 11-14, 1901. Dr. P. M. Wise is the president, and Dr. C. B. Burr is the secretary.

THE American Medical Editors' Association will hold its annual meeting at St. Paul, June 3, 1901, under the presidency of Dr. Alex. J. Stone.

THE National Association for the Study of Epilepsy and the Care and Treatment of Epileptics held a meeting at Washington, May 14 and 15, 1901, under the presidency of William P. Letchworth, LL.D. Dr. Wm. P. Spratling is the secretary.

THE Buffalo Academy of Medicine held meetings during the month of May, 1901, as follows:

Section on Surgery.—Tuesday evening, May 7th. Program: Something new regarding stricture, J. Henry Dowd.

Section on Medicine.—Tuesday evening, May 14, 1901. Program: The relation of the medical profession in the twentieth century to the tuberculosis problem, S. A. Knopf, New York; The paper was discussed by Drs. Charles G. Stockton, Ernest Wende, John Pryor, DeLancey Rochester and B. G. Long.

Section on Ophthalmology, Otology and Laryngology.—Monday evening, May 20th. Program: Exhibition of an instrument for measuring the balance of ocular muscles, Elmer E. Starr; Sinus phlebitis and thrombosis, John E. Sheppard, Brooklyn, N.Y.

Section on Pathology.—Tuesday evening, May 21st. Program: Original researches on trichinosis—illustrated—Herbert U. Williams; The brachial plexus, Abram T. Kerr.

Section on Obstetrics.—Tuesday evening, May 28th. Program: Excision of the bladder, Matthew D. Mann.

The American Dermatological Association holds its 25th annual meeting at the Beach Hotel, Chicago, May 30 and 31, and June 1, 1901.

The Medical Society of the County of Erie will hold its 80th semi-annual meeting at the Y.M.C.A. parlors, corner of Mohawk and Pearl Streets, Tuesday, June 11, 1901, beginning at 10 o'clock a.m., under the presidency of Dr. Wm. C. Phelps. Dr. Henry L. Elsner, of Syracuse, President of the Medical Society of the State of New York, will read a paper and Dr. Henry R. Hopkins, of Buffalo, will present the subject of schoolhouse sanitation. A full attendance is desired.

The Mississippi Valley Medical Association has changed the date of its meeting to the 12th, 13th and 14th of September, 1901. It is to be held at Put-in-Bay Island (Lake Erie), O.

COLLEGE AND HOSPITAL NOTES.

The Albany Hospital, which was practically completed last year, has undergone many needed improvements lately, so that it is now one of the best equipped and most superb of all our modern hospitals. Its operating room is a model of perfection; its walls and ceiling are of white glazed tile, its window and door cases of marble, its floor of tile and its operating table is of the most modern and convenient construction. The total cost of the hospital exclusive of the land is $294,918.38. The institution is a credit to the men who have supervised and carried to completion this splendid structure.

The Dental Department U. of B. graduated a large class May 14, 1901. The exercises were held at the Star Theatre and the address to the graduates was delivered by Dr. Archibald Dann, of Rochester.

The State Hospital for the care of persons suffering from incipient tuberculosis is now an assured fact. Governor Odell has signed the bill appropriating $100,000, to be expended in building it, which will enable the managers to put the scheme to an adequate test.

The Niagara Falls Memorial Hospital graduated four nurses from its training school May 14, 1901. Dr. F. Park Lewis, of Buffalo, addressed the graduates, who were the Misses Margaret Catharine

Madigan, Florence A. Manley, Cecilia Brown, and Josephine H. Eddy. A reception followed the exercises.

THE Buffalo Homeopathic Hospital has appointed the following staff for the current year: Consulting physicians, Alexander T. Bull, Henry Baethig, H. A. Foster, John Miller, A. M. Curtiss, D. B. Stumpf, P. A. McCrea. Attending physicians, E. P. Hussey, J. T. Cook, B. J. Maycock, T. J. Martin, E. A. Fisher. Attending Surgeons, H. C. Frost, G. T. Moseley, D. G. Wilcox, W. H. Marcy. Obstetricians, G. R. Stearns, J. S. Halbert, Jessie Shepard. Ophthalmic surgeon, F. Park Lewis. Pathologist, George R. Critchlow. Laryngologist, Frederick D. Lewis.

The officers are: President, Dr. Burt J. Maycock; first vice-president, Dr. Henry Baethig; second vice-president, Dr. Elisha P. Hussey; secretary, Dr. Joseph T. Cook.

Book Reviews.

A TEXT-BOOK OF GYNECOLOGY. Edited by CHARLES A. L. REED, A. M., M. D., President of the American Medical Association (1900-1901); Gynecologist and Clinical Lecturer on Surgical Diseases of Women at the Cincinnati Hospital; Fellow of the American Association of Obstetricians and Gynecologists; Fellow of the British Gynecological Society, etc. Octavo, pp. 925. Illustrated by R. J. Hopkins. New York: D. Appleton & Co. 1901. [Price, $5.00.]

When some months ago the announcement was made that a new treatise on gynecology was soon to appear, edited and partly written by the distinguished president of the American Medical Association, it set that portion of the profession interested in that topic all agog; because, in part, of Dr. Reed's wide acquaintance with gynecologists in both hemispheres, and again, because of his resourcefulness as a clinician, his originality as a teacher, and his skilfulness at the operating table.

It is a pleasure to discover, after a careful examination of the book in question, that no disappointment lurks in its pages. It is essentially a text-book of gynecology, containing much that is original on that branch of medicine, while all of it is newly arranged, practically grouped and forcefully presented. It follows the fashion of the day in its encyclopedic form, but it differs from most books prepared in that way on account of the clever manner in which the editor has woven the warp and woof of his fabric; so cleverly, indeed, has this been done that the expert, unless he glanced at the list of contributors preceding the table of contents, would hardly dream that it was not a book by a single author.

The following-named writers, most of whom are widely known, appear in the list of contributors: J. W. Ballantyne, Edinburgh; J. H. Carstens, Detroit; Murdoch Cameron, Glasgow; Henry C. Coe, New York; John G. Clark, Philadelphia; F. X. Dercum, Philadelphia; Walter B. Dorsett, St. Louis; L. H. Dunning, Indianapolis: Frank P. Foster, New York; Samuel G. Gant, New York; Hobart Amory Hare, Philadelphia, Malcolm L. Harris, Chicago; Maxi-

PROFESSOR CHARLES A. L. REED, M. D.,
President American Medical Association, 1901,
Author-Editor of Reed's Gynecology.

milian Herzog, Chicago; R. J. Hopkins (artist) New York; Joseph Tabor Johnson, Washington; Wyatt G. Johnston, Montreal; Matthew D. Mann, Buffalo; Thomas Charles Martin, Cleveland; Lewis S. McMurtry, Louisville; Dan Millikin, Hamilton, O.; Henry P. Newman, Chicago; William Warren Potter, Buffalo; A. Ravogli, Cincinnati; Charles A. L. Reed, Cincinnati; Hunter Robb, Cleveland; James F. W. Ross, Toronto; A. W. Mayo Robson, Leeds; J. L. Rothrock, St. Paul; W. Japp Sinclair, Manchester; Horace J. Whitacre, and E. Gustave Zinke, Cincinnati.

One of the important features of this work, wherein, too, it differs from most of its kind, is the importance given to general or systemic treatment. This will give it a strong hold upon that large number of physicians who, not being specialists yet practice gynecology to a large extent and, withal, intelligently. The surgical part of the work, which, of course, constitutes its greater bulk, is exceptionally well handled; indeed, for the most part it is in advance of anything yet published on operative gynecology. Many of the methods described are new in technic. The descriptive text and the well-drawn illustrations make all such extremely clear, even to the inexperienced eye.

There are several subjects which do not usually appear in works of this kind, or at least, if they do, they are not elaborated by experts and specialists in the several topics. For instance, the relation of pelvic diseases and nervous affections is described by a neurologist, Dr. Dercum; neoplasms of the rectum are described by a proctologist, Dr. Gant; and the relation of diseases of the skin to gynecology are told by a dermatologist, Dr. Ravogli. Again, whatever relates to bacteriology, pathology, hygiene and other similar topics is written by men skilled in these several branches; hence, it often happens that several different authors appear as contributors to a single chapter. The advantage of this plan becomes apparent to every experienced gynecologist. It constitutes one of the unique features of this book, and the editor has so cleverly interwoven the lines of the various authors, often adding observations and comments of his own, that the whole literary and scientific fabric has become amalgamated into one homologous structure. It is doubtful if this has ever been as cleverly done in a work of poly-authorship.

An incisive part of this work is that relating to sepsis and antisepsis. It is very essential that the gynecological tyro shall have definite knowledge of the relations these two subjects bear to each other, and to gynecology in general. The editor has prepared what is said on this subject with great care and conciseness. Closely allied to it are the infections, and these are also discoursed upon by the editor, with the exception of that portion on tuberculosis, which is written by Dr. Whitacre, and another portion on infections of the uterus, written by Dr. McMurtry.

The mechanical make-up of the book deserves particular notice. In the first place, the simplicity of the title-page impresses the observer at once, because it is in such contrast to many of the grandiose airs that pervade the title pages of medical treatises nowadays. The illustrations by Mr. Hopkins, whether judged from the artistic or scientific viewpoint are of a superb character. They are for the most part original, more than nine-tenths never until now having appeared in gynecological literature. The legends descriptive of the figures have been extracted from the text, after the fashion prevailing in current fiction. We confess to a strong liking of this unique feature. A most comprehensive and well-prepared index closes this attractive, scientific and modern text-book of gynecology that will command the attention of every gynecologist in both hemispheres.

THE PATHOLOGY AND SURGICAL TREATMENT OF TUMORS. BY N. SENN, M. D., Ph. D., LL. D., Professor of Surgery, Rush Medical College in Affiliation with the University of Chicago; Professor of Surgery, Chicago Polyclinic; Attending Surgeon to Presbyterian Hospital; Surgeon-in-chief, St. Joseph's Hospital, Chicago. 8vo, pp. 718. Second edition, revised. Illustrated by 478 engravings, and 12 full-page plates in colors. Philadelphia: W. B. Saunders & Co. 1900. (Price cloth, $5 00, net; half-Morocco, $6.00 net.)

That within a few years a second edition of Dr. Senn's large book on tumors has been called for, speaks well for the reception accorded the first. The first edition has been so long before the medical public that they have had ample opportunity to become acquainted with its general characteristics. It was essentially a general handbook of the subject in its pathological and clinical aspects, and formed a very useful work in that its readers could get a comprehensive grasp, both of the nature of various growths and the best methods by which to treat them. It evinced a large amount of research, although it had about it very little which was distinctly original. Dr. Senn is essentially an encyclopedist rather than a great original student. When now we come to consider the second edition, we find that it contains all the good characteristics which marked the first, and that considerable has been added to it. When, however, one takes up the book with the endeavor to acquire the very latest information about some of the disputed pathology of tumors, he is necessarily disappointed, since the book contains but little of that which one would expect to find in this direction.

First of all, the index is very inadequate and disappointing, and one must search through many pages before he decides whether a given subject is treated or not. In the second place, authors and authorities are frequently mentioned and ample credit given in this way, but should one wish to consult their articles he finds few, if any references to volume and page, and must hunt these up from some other source.

One would certainly have a right to turn to this book for a résumé of Wilm's papers on the general subject of teratoma; and also for information concerning that particular form of adrenal tumor which has now been amply described, first, by Grawitz, and in this country by Kelly and others, known as hypernephroma. The word does not appear in the index, nor is there any mention of teratomata of the kidney. So, also, in the case of that other mixed tumor of the kidney which has been amply and repeatedly described, and which has gone by so many names, among them, cystadenoma, adenosarcoma, etc., essentially of congenital origin. The writer has been able to find no description of it whatever in this new and revised edition. Again, in the index, the word endothelioma does not appear, and one is compelled to hunt through the text before he finds any mention of the subject, and even then he finds a very inadequate description of it, although it has been most carefully written up by Volkmann and by others. Still more is this true of perithelioma, which appears neither in the index nor text. The same also of cylindroma, which certainly deserves mention, whether it be regarded according to the old views of Bilroth, or under the modern classification as a sub-variety of sarcoma.

Under the heading of sarcoma, no distinct nor adequate description of osteosarcoma is given, while that given of angiosarcoma is inadequate and very misleading. The author has failed to make it clear that there is a great difference between sarcoma of bone and osteosarcoma, the former referring to a tumor proceeding from the periosteum or medulla, while the latter is a tumor originating in the original stroma or texture of the tissue which shall later become bone.

There is a short description of deciduoma malignum, although it is not called by the name now generally given to it of chorion epithelioma. Moreover, a distinct error is here made in that it is spoken of as being occasionally of sarcomatous character, whereas the studies of Marchand have placed the epithelial nature of all these tumors beyond a doubt. The author, in his consideration, has evidently followed Sänger, neglecting the later and much more accurate studies, for now nobody but a gynecologist would hold to its sarcomatous nature.

But it is ungracious to continually find fault with a book, only one must necessarily have a feeling that this is a work to which he has a right to turn for the very latest information, in which feeling he will receive a very distinct disappointment. It would have been much better for the profession had this book been retained a time longer in order that all this new matter might have been inserted. Nevertheless, it is a great help to the general practitioner and one may find but little fault with that which it does contain, while regretting that which it does not. The author is evidently no friend of the parasitic nature of malignant growths, and by no means does adequate justice to the work which has been done to establish this hypothesis. In fact, it would almost seem as if he were like Holmes's theologians who close their nicitating membranes, or third eyelids, toward that which they do not care to see. Many of the illustrations are good, especially the newer ones, while some of them are quite shabby, and by no means up to the standard of such a representative work as this is supposed to be. Let us hope that the author will before long prepare a third edition, in which one may look for at least an epitomé of the whole subject in its modern aspect and experience no disappointment.

CANCER OF THE UTERUS. Its Pathology, Symptomatology, Diagnosis and Treatment. Also the Pathology of Diseases of the Endometrium. By THOMAS STEPHEN CULLEN, M. B. (Toronto), Associate Professor of Gynecology in the Johns Hopkins University. Imperial 8vo, pp. 709, with 11 lithographic plates and over 300 colored and black illustrations in the text, by Max Brodel and Hermann Becker. New York: D. Appleton & Co. 1901. [Prices, cloth, $7.50; half morocco, $8.50.] By subscription only.

Without doubt cancer of the uterus, all things considered, is the most terrible malady that can afflict woman. The object of this volume is to aid the physician, and especially the family doctor, in making an early diagnosis of the dread malady. To this end the author has pointed out not only the early signs of carcinoma, but he also records in detail such diseases as may be mistaken for or confounded with cancer. His chapter on the anatomy of the uterus is one of the most accurate that has been published, and the illustrations are so correct and clear as to charm the reader at the very beginning of the book.

After devoting a chapter to the removal and examination of uterine tissues for diagnostic purposes, the author proceeds to the consideration of the squamous-cell carcinoma of the cervix, which occupies about 240 pages of the book. It is beautifully illustrated with plates, engravings and half-tones, showing every stage in the pathology of this, the commonest form of cancer of the uterus. One of the worst features to deal with in this form of the disease is, the fact that the new growth often proceeds to a stage of considerable advancement without attracting the attention of the victim. Too often has the family doctor treated with indifference the first interview with his patient who may incidentally mention some slight uterine symptom. If he will read these pages with care, he will become convinced that it is of the first importance to carefully investigate every case that presents itself to him with the slightest suspicion.

It becomes the emphatic duty of the physician particularly to inquire into any departure from the normal cessation of the menopause, this being a time when there is great liability to the invasion of cancer. The carefully recorded clinical histories that are so copiously reported do much to aid in coming to a clear understanding of this subject.

The author allots about 300 pages of the text next following to the consideration of adenocarcinoma of the cervix and body of the uterus. This, like the preceding section of the book, is illustrated with admirable accuracy of detail as well as great profuseness, here and there color being used to give strength to the contrast in pathological tissue. Here, too, are to be found clinical histories almost without number, amplifying and illustrating the subject in great detail.

In the remaining chapters treatment and rare conditions are handled, as well as complications, such as pregnancy, together with prognosis and etiology; also, some inoculation experiments are given, bearing upon the general question of the nature and cause of the disease.

The book is printed on heavy plate paper with clear-face type and, with its excellent illustrations, presents as beautiful a specimen of the book-making art as one will see in many a day. Moreover, it is a wonderful book. It is a royal octavo volume of 693 pages, entirely devoted to the consideration of one disease, in its attacks upon one organ of the body in one half of the human race. It is one of the most useful books that has lately issued from the press and ought to do much toward restraining the ravages of the terrible disease with which it deals.

DISEASES OF THE NERVOUS SYSTEM. A text-book for students and practitioners of medicine. By H OPPENHEIM, M. D., Professor at the University of Berlin. Authorised translation by Edward E. Mayer, A. M., M. D., Pittsburg. First American from the second revised and enlarged German edition. Large 8vo., pp. 899. With 293 illustrations. Philadelphia and London: J. B. Lippincott Co. 1900.

Among the younger German neurologists none has acquired more popularity than the able assistant of the late Professor Westphal. The Charity Hospital at Berlin affords opportunities unexcelled on the continent, and in the midst of such surroundings the author of this excellent work had his workshop. Careful, painstaking examinations, and logical deductions, characterise Oppenheim's work whether in the hospital ward, laboratory, or clinic room and these characteristics have borne fruit as evidenced by the success which has attended his work on nervous diseases. Oppenheim has striven to make this work useful to the practitioner and has laid particular stress on diagnosis, symptomatology and treatment, while the pathological anatomy underlying the different diseases has been curtailed in so much that only what was necessary to shed light upon the course of a disease, or to pave the way for a diagnosis is given.

The author divides his work into two parts—the general part treating of the methods of examination, general symptomatology and objective examination; and Part II., or special part, treating of the various diseases. In speaking of the tendon reflexes, the author deprecates the prevalent habit of calling an absent reflex, Westphal's sign. It is customary in this country at least to call it a Westphal sign—*only* when occurring in locomotor ataxia, and not when occurring in infantile paralysis, or toxic neuritis, for instance. The chapter on electro-diagnosis, is fully described and presents a clear exposition of this important aid in making critical examinations.

Under Part II., the author takes up the diseases of the spinal cord, peripheral nerves, brain, the neuroses, troplo and angioneurosis, and toxic conditions with predominating nervous symptoms. In describing these various diseases, the author has given due consideration to other observers, but hardly a chapter in which he himself has not made notable additions to our knowledge on the subject. Myelitis, locomotor ataxia, the traumatic neuroses, brain tumors, the diseases of the pons and medulla, Oppenheim's discoveries stand out in good light In this edition reference has been made to the *x* ray in diagnosticating disorders of the vertebral column, and brain, but in a very conservative manner.

The illustrations are many, but some are not as clear as in the German edition. On the whole, no better text-book on neurology exists in the German language than that of Oppenheim's. The translation is even, accurate and a credit to the American edition. Binding, paper and printing are of Lippincott's best. W. C. K.

A TEXT-BOOK ON PRACTICAL OBSTETRICS. By EGBERT H. GRANDIN, M. D., Gynecologist to the Columbus Hospital; Consulting Gynecologist to the French Hospital, etc. With the collaboration of George W. Jarman, M. D, Gynecologist to the Cancer Hospital. Third edition, revised and enlarged. Illustrated with 52 full-page photographic plates and 105 illustrations in the text. Pages xiv.—511. Philadelphia: F. A. Davis Company. [Price, cloth, $4.00 net; sheep, $4.75 net.]

The first edition of this book appeared in 1894. In it an attempt was made to revolutionise the methods of instruction in obstetrics. Despite its defects and the many obstacles it met, it was partially successful in its mission.

This third edition has been very much enlarged beyond the limits of the original treatise, and some additions have been made, notably a chapter on the anatomy of the female organs of generation, and one on embryology. Some changes, too, have been made in the arrangement of the illustrations, by reducing the size of a number and grouping them, which adds to the homogeneity of the volume.

While there are still some defects, and a few errors in the book, it is yet a valuable addition to the obstetric department of the library, and will easily find a place there. Both teachers and practical obstetricians among the general profession will find it a valuable aid.

INTERNATIONAL CLINICS. A Quarterly of Clinical Lectures and Especially Prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Pediatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose and Throat, etc. Edited by HENRY W. CATTELL, A. M., M. D., of Philadelphia, with the collaboration of Jonn B. Murphy, M. D., of Chicago; Alexander D. Blackader, M. D., of Montreal; H. C. Wood, M. D., of Philadelphia; T. M. Rotch, M. D., of Boston; E. Landolt, M. D., of Paris; Thomas G Morton, M. D., and Charles H. Reed, M. D., of Philadelphia; J W. Ballantyne, M. D., of Edinburgh, and John Harold, M. D., of London. Volume IV., Tenth series; and Volume I., Eleventh series. 1901. Philadelphia; J. B. Lippincott Company.

I. The first of the volumes above noted contains lectures on therapeutics, genito-urinary diseases, medicine, neurology, surgery, pathology and laboratory methods, together with a monograph by Henry W. Cattell on the eitology and morbid anatomy of various diseases. The volume opens with an interesting article on the United States Pharmacopeia by Horatio C. Wood, and the department of therapeutics also contains an article of value on Mosquitoes and the Prophylaxis of Malaria by Professor Grassi.

In the symposium on genito-urinary diseases, James Pedersen lectures on the treatment of urethritis in the male. This is a most instructive contribution to the therapeutics of this disease. John B. Deaver contributes a lecture on several surgical diseases which constitutes the entire contribution to the department of surgery in the book. It is made up of abstracts from the public Saturday clinical lectures delivered by the author at the German Hospital, Philadelphia. The material for these lectures was secured from reports furnished by several young physicians in competition for a prize offered by Dr. Deaver for the best accounts of his clinics. This is a most commendable method to secure accuracy and good material for publication and this series will be continued in future issues of this work.

II. Volume I. of the eleventh series contains lectures on therapeutics, medicine, neurology, surgery, obstetrics and gynecology, diseases of the eye, laboratory methods, together with a review of the progress of medicine during the year 1900, prepared by N. J. Blackwood. Dr. Deaver continues the abstracts of his clinics referred to in our notice of the previous volume, this time, however, in the department of gynecology. There are a number of other contributors of note to this book and it is a volume of interest. Indeed, these two are among the best numbers of the clinics yet issued.

TRANSACTIONS OF THE AMERICAN OTOLOGICAL SOCIETY. Thirty-third annual meeting, Washington, D. C. 1900.

This is not a volume of many pages, but it contains papers of value by some of our most eminent otologists. The one by Dr. Herman Knapp, New York, on Extensive acute caries of the mastoid and petrous portions of the temporal bone, and one by Dr. A. B. Randall, of Philadelphia, on clinical anatomy of the Eustachian tube, are especially notable. Other contributors are Dr. Hiram Woods, Jr., of Baltimore; Dr. E. B. Dench, Dr. Gorham Bacon, Dr. E. Friedenberg, all of New York, and Dr. C. H. Burnett, of Philadelphia. An alphabetical index of otological literature is appended, which is compiled by Dr. H. A. Alderton, of Brooklyn.

A. A. H.

BOOKS RECEIVED.

Saunders's Medical Hand-Atlases. Atlas and Epitomé of the Nervous System and its Diseases. By Professor Dr. Chr. Jakob, of Erlangen. From the second revised German edition. Edited by Edward D. Fisher, M. D, Professor of Diseases of the Nervous System, University and Bellevue Medical College, New York. With 83 plates and copious text. Philadelphia and London: W. B. Saunders & Co. 1901. [Cloth, $3.50 net.]

Saunders's Medical Hand-Atlases. Atlas and Epitomé of Obstetric Diagnosis and Treatment. By Dr. O. Shaeffer, of Heidelberg. From the second revised German edition. Edited by J. Clifton Edgar, M. D., Professor of Obstetrics and Clinical Midwifery, Cornell University Medical School. With 122 colored figures on 56 plates, 38 other illustrations, and 317 pages of text. Philadelphia and London: W. B. Saunders & Co. 1901. [Cloth, $3.00 net.]

Saunders's Medical Hand-Atlases. Atlas and Epitomé of Labor and Operative Obstetrics. By Dr. O. Shaeffer, of Heidelberg. From the fifth revised German edition. Edited by J. Clifton Edgar, M. D., Professor of Obstetrics and Clinical Midwifery, Cornell University Medical School. With 14 lithographic plates, in colors, and 139 other illustrations. Philadelphia and London: W. B. Saunders & Co. 1901. [Cloth, $2.00 net.]

Saunders's Medical Hand-Atlases. Atlas and Epitomé of Ophthalmoscopy and Ophthalmoscopic Diagnosis. By Professor Dr. O. Haab, Director of the Eye Clinic in Zurich. From the third revised and enlarged German edition. Edited by George E. de Schweinitz, Professor of Ophthalmology, Jefferson Medical College, Philadelphia. With 152 colored lithographic illustrations and 85 pages of text. Philadelphia and London: W. B. Saunders & Co. 1901. [Price, $3.00 net.]

Saunders's Question Compends. Essentials of the Diseases of Children. By William M. Powell, M. D. Third edition. Thoroughly revised by Alfred Hand, Jr., M. D., Dispensary Physician and Pathologist to the Children's Hospital, Philadelphia. Duodecimo, 259 pages. Philadelphia and London: W. B. Saunders & Co. [Price, $1.00 net.]

A Text-Book of the Practice of Medicine. By Dr. Herman Eichhorst, Professor of Special Pathology and Therapeutics and Director of the Medical Clinic in the University of Zurich. Translated and edited by Augustus A. Eshner, M.D., Professor of Clinical Medicine in the Philadelphia Polyclinic. Two octavo volumes of over 600 pages each; over 150 illustrations. Philadelphia and London: W. B. Saunders & Co. 1901. [Price per set: Cloth, $6.00 net]

The Acute Contagious Diseases of Childhood. By Marcus P. Hatfield, A. M., M. D., Professor Emeritus of Diseases of Children, Northwestern University Medical School; Professor of Diseases of Children, Chicago Clinical School; Attending Physician, Wesley Hospital. Pages, 142. Chicago: G. P. Engelhard & Co. 1901. [Price, $1.00 net.]

A System of Physiologic Therapeutics. A Practical Exposition of the Methods, other than Drug-giving, useful in the Treatment of the Sick. Edited by Solomon Solis Cohen, A. M., M. D, Professor of Medicine and Therapeutics in the Philadelphia Polyclinic; Lecturer on Clinical Medicine at Jefferson Medical College; Physician to the Philadelphia and Rush Hospitals, etc. Volume I Electrotherapy. By George W. Jacoby, M. D., Consulting Neurologist to the German Hospital, New York City; to the Infirmary for Women and Children; and to the Craig Colony for Epileptics, etc. In two books. Book I. Electrophysics—Apparatus Required for the Therapeutic and Diagnostic use of Electricity. Octavo, pp. 242; 163 illustrations. Philadelphia: P. Blakiston's Son & Co. 1901. [Price for the complete set, eleven volumes, $22.00.]

Uterine Fibromyomata. Their Pathology, Diagnosis and Treatment. By E. Stanmore Bishop, F.R.C.S. Eng. President Manchester Clinical Society; Fellow of the British Gynecological Society, etc. Octavo, pp. 323; 49 illustrations. Philadelphia: P. Blakiston's Son & Co. 1901. [Price, $3.50.]

3500 Questions on Medical Subjects. Arranged for self-examination. With the proper references to standard works in which the correct replies will be found. Third edition, enlarged. With questions of the state examining boards of New York, Pennsylvania and Illinois. Philadelphia: P. Blakiston's Son & Co. 1901 [Price, 10 cents.]

Clinical Pathology of the Blood. A treatise on the general principles and special applications of Hematology. By James Ewing, M. D., Professor of Pathology in Cornell University Medical College, New York City. In one handsome octavo volume of 432 pages, with 28 engravings and 14 full-page plates in colors. Just ready. Philadelphia and New York: Lea Brothers & Co. 1901. [Price, cloth, $3.50 net.]

A Reference Handbook of the Medical Sciences. Embracing the entire range of scientific and practical medicine and allied science By various writers. A new edition, completely revised and rewritten. Edited by Albert H. Buck, M. D., New York City. Volume II. Bla–Chl. Illustrated by numerous chromolithographs and 765 half-tone and wood engravings Nine volumes, imperial 8vo. New York: William Wood & Co. 1901. [Price, muslin, $6.00 per volume; leather, $7 00 per volume; half-morocco, $8.00 per volume.]

Contemporary Celebrities from the Album Mariani of Paris, France. New York: Published by Mariani & Co., 52 West 15th Street. 1901.

Whitman's Orthopedic Surgery. For students, practitioners and specialists. By Royal Whitman, M. D., Adjunct Professor of Orthopedic Surgery, New York Polyclinic; Instructor in Orthopedic Surgery in the College of Physicians and Surgeons, and Chief of Orthopedic Department in the Vanderbilt Clinic, New York. In one handsome octavo volume of 642 pages, with 447 illustrations. Philadelphia and New York: Lea Brothers & Co. 1901. [Price, cloth, $5.50 net.]

The Diagnosis and Treatment of Diseases of the Nose, Throat, Naso-Pharynx and Trachea. For the use of students and practitioners. By Cornelius G. Coakley, M. D., Professor of Laryngology in the University and Bellevue Hospital Medical College, New York. New (second) edition. In one handsome 12mo volume of 556 pages with 103 engravings and 4 colored plates. Philadelphia and New York: Lea Brothers & Co. 1901. [Cloth, $2.75 net.]

A Practical Treatise on Simple and Chronic Specific Urethritis By J. Henry Dowd, M. D., late Genito-Urinary Surgeon at the Buffalo Hospital of the Sisters of Charity; formerly Chairman of the Surgical Section of the Buffalo Academy of Medicine Illustrated 16mo, pp. xxxi.—135. Buffalo: A. W. Landsettle. 1901. [Price, $1.50.]

LITERARY NOTES.

THE Grosvenor Public Library has added to its medical department the library of the late Dr. F. W. Abbott, which is largely composed of works on the eye and ear. The library is fast developing its medical branch by additions of new books as fast as they appear.

LOVE'S *Medical Mirror*, formerly published at St. Louis, will hereafter issue from New York. Its editorial office is at 537 Fifth Avenue, and its business office at 100 William Street.

POLK'S *Medical Register* is in preparation for its 16th year. It embraces names of over 130,000 physicians, with college of graduation, list of colleges, societies, boards of health, journals, mineral springs, hospitals, sanitariums, asylums and other medical institutions; also medical laws of each state. It is indispensable as a book of reference; see advertisement on page xxx.

ITEMS.

THE Farbenfabriken of Elberfeld Company has obtained from the United States Circuit Court of Pennsylvania, sitting in equity, a decision in its favor, the effect of which is to sustain the validity of the patent on phenacetin. If we must have patented chemical products in medicine, it is well to know that the patents are genuine, and that the original cartons are amply protected.

SPECIAL TRAIN FOR THE AMERICAN MEDICAL ASSOCIATION.

THE Chicago & Northwestern Railway has perfected arrangements to run a special train from Chicago to St. Paul to accommodate members and their friends who will attend the meeting at the latter city. The train will leave Chicago, Monday evening, June 3d, reaching St. Paul next morning in time for breakfast. The flat rate from Buffalo to St. Paul and return is $26.60.

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Original Communications.

THE NATURE OF THE CANCEROUS PROCESS.[1]

BY ROSWELL PARK, A. M., M. D.,
Professor of surgery, Medical Department of the University of Buffalo.

LIKE a huge and frowning sphinx at the very gateway or entrance to the field of surgical pathology, has stood for centuries the great problem of the nature of cancer. This has at least until recently remained the inscrutable mystery of ages, and like the great sphinx at Ghizeh, it has been always a target for shafts of all kinds. Almost every theory which the ingenuity of the human race could conceive has been advanced to account for the existence of cancer, while each theory has been ardently supported until proven unsatisfactory, or often much longer. Today, while we desire always to pay due deference to the scholars and thinkers of time past, the only hypotheses which are even worth mentioning in this connection can be characterised as the dietetic, the embryological, the irritation, and the parasitic theories. The dietetic theory is of importance only in case we may succeed in maintaining the parasitic nature of the disease, when it may become a subsidiary question as to whether certain raw or uncooked food may furnish at least some of the parasites in question. So far as can be seen, only to this extent can the matter of diet have anything to do with the nature of cancer. How far it may come into consideration in explaining rapidity of growth, or even susceptibility to infection, is another matter, also of subsidiary importance.

The embryological theory of Cohnheim was a vast stride in advance, in that it offered the explanation of many curious and anomalous growths, but nothing contained within that hypothesis can ever explain the peculiar behavior of cells which constitute the essential features of malignant growths. Cohnheim's explanation is sufficient to account for the presence of certain cells in unusual localities, but not for their peculiar behavior. The relation of irritation and trauma to cancer formation has always attracted attention, and today figures perhaps as prominently as it ever did in this respect. That malignant growths frequently do follow local injuries and local irritations is most certain. The same thing is exactly as true of certain of the infectious granulomata, especially of tubercular lesions, and viewed in its proper aspect we must hold that, while serious injuries provoke extensive and serious reaction, minor injuries are often followed by such incomplete reaction and such altered tissue relations as to leave points of least resistance, which in tuberculosis, as in cancer, are favorite foci for infection. Granting the ubiquitousness of the infectious agent, and a point of lessened resistance, one may easily appreciate the relation of trauma to cancer. The same is true of that constant but trifling traumatism which we term local irritation, as, for instance, from a dirty pipe or a jagged tooth.

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[1] Abstract of a paper read before the Surgical Section of the American Medical Association, at St. Paul, June 5, 1901.

The parasitic or infectious theory of cancer is the only one which satisfies the needs of both the pathologist and of the clinician. There has always been a strange apathy among the clinicians who meet so often the antemortem features of this disease, but who apparently remain so aghast at its mysteries that they have been content to leave its solution to the microscopist. The histologists, on the other hand, have their only opportunity of studying the disease in dry and hardened sections beneath the lens. The viewpoints of these respective gentlemen have been so widely different that they have rarely, if ever, gotten together and discussed the situation on common ground. All examinations of fresh and still warm specimens and all interpretation of the phenomena during life, have been neglected in this too minute division of labor. It was the realisation of all this that impelled me years ago to outline the character of the investigation required, and to secure from the legislature of the State of New York the facilities for furthering it.

Today, you will with me hold this to be true, that the history of absolute failure during time past to demonstrate an intrinsic cause, combined with accurate clinical observation and constant contact with cases, with a study of the disease as it occasionally occurs in endemic form, with the argument by analogy—upon which I shall elaborate in a moment—and with recent microscopic studies, all conspire to stamp the disease as due to an extrinsic cause, *i.e.*, to be parasitic in origin. Thus far one may safely go without transgressing well defined limits. Are we now able to go further and say that the parasites have been discovered? For myself, I do not hesitate to answer this positively in the affirmative; that is, I am firmly of this opinion, based upon work done elsewhere, and especially upon that done, to my own positive knowledge, in our own laboratory, and corroborated apparently by the independent investigations of Pfeiffer, Sawtschenko, Sjöbring, Eisen, and most recently, of Max Schüler, whose new monograph just published is the most striking, independent, and beautifully satisfactory demonstration of every statement that has emanated from the Buffalo laboratory that can be imagined.

The arguments that can be adduced in favor of the parasitic hypothesis can be summarised in a few pages. For this purpose, first, take the argument by analogy, beginning with the lower forms of life. Tumors in trees and plants are well known to vegetable pathologists and botanists. They occur so often as to escape notice. They vary in size from the most trifling gall to those large woody masses known as xylomata, which bring about the eventual destruction of the tree. They are frequently spoken of as tree cancers. These are due almost invariably to a species of infection. In other instances the first injury is traumatism, or its equivalent, such as is produced by the freezing of water contained within the grooves of the bark and the consequent splitting open of this protective covering, with its possibility for infection of the growing wood beneath. Through this laceration infectious agents enter from without and produce similar results. When carried to the extreme the nutrition of the limb, or the entire trunk, may be so far disturbed as to determine the death of the whole, or a part, of the tree. Were parasitic agents entirely excluded, there would be no such thing as cancer of trees. Could they be excluded, every laceration of bark would heal, as does any protected wound in animal forms, and the result would be protection from irritation and normal repair. The more one studies tumor formation in the vegetable kingdom, the more striking will the analogy become.

Comparative pathology will furnish many other arguments. Tumors are common in the lower animal forms and would be found much more so, if our observations were more minute and exact. One cannot avoid the conclusion that tumors in animals and man are due to the same general causes. If, then, their existence in animals can be proven to be of parasitic origin, it strengthens the conclusions in favor of a similar origin for such lesions in man.

One of the strongest of all arguments, and one which is really irrefutable, is that which we may get from the study of well-known infections which produce tumor formations. Take, for instance, the so-called infections granulomata. The essential differences between these and cancers are not their histological structure, but the fact that we know their minute causes. These tumors which used to be included with malignant tumors have been put in a class by themselves, simply because their causes are now well known, and modern writers have drawn very sharp lines between these tumors about which they have learned much and cancers about which they know very little. And yet these infectious granulomata are in many instances just as fatal as are the true cancers, and are amenable to the same methods of treatment and permit of the same general management; *i.e.*, they are distinctly surgical lesions.

Take, again, the matter of metastasis. There is no known infectious disease characterised by metastasis, from the most acute of the septic or pyemic type to the slowest manifestations of tuberculosis, in which we do not regard metastatic lesions as one of the principal evidences in favor of their infectiousness. Why pathologists have been so loath to see in similar manifestations of cancer a like evidence of its own infectiousness, I have never been able to understand.

Take, again, the matter of the local infectivity of cancerous lesions. The numerous repeated and now well known instances in which cancerous infection has followed the track of such instruments as the trocar, for example, afford other evidences whose value is undeniable. Aside from anything that the microscope may show, a few cases of this kind will have more value than all the failures of all the experimenters of the past century.

Regarding the microscopical appearances of these growths, we have had almost numberless hypotheses advanced to account for the well-known fact, that in and between the cells of cancerous growths are seen peculiar forms or particles which have been regarded by some as parasites, by others as products of cell degeneration, and by others yet as pure artefacts. It has been hard for observers to prove that they are cell degenerations and there are wide differences of opinion between those who hold to this view, as well as among those who regard them as parasites. Certain it is that no such appearances are noticed in healthy tissues, or in the infectious granulomata, or in the truly benign tumor. They must be either cell degenerations or parasites. No one has ever been able to reproduce such degenerations under other circumstances, nor are they known or scarcely even named. On the other hand, exactly similar appearances have been produced in large numbers after inoculation or experimentation.

It is true that observers have differed widely regarding their parasitic nature. Their exact nature is of secondary importance if their parasitic rôle can only be established. The first thing to prove is that cancer is of parasitic origin. Can this be done? It has been done, for instance, in the case of malaria where the parasites are seen inside as well as outside of the blood corpuscles, and, although we as yet know little, if anything, about their biological characteristics, we nevertheless accept them as parasites. Exactly similar appearances can be noted in and around the cells of rapidly growing cancers, and especially in parts where growth is most recent and rapid. Moreover, if scrapings be taken from a cancer while still fresh and warm, there may be observed under the lens unmistakable ameboid movements of many of these bodies which, when stained in sections, are seen in locations mentioned above.

This is not a question of bacteria. It is now a question of organisms, about which as yet we know very little; as little, in fact, as the profession in general knew of bacteria when Cohn first began studying them. We turn then from bacteria to some other form of parasitic life as the necessary explanation of known phenomena. Herein lies our greatest difficulty. We are as yet almost in total ignorance of these lowly forms of life and their biological peculiarities. We do not even know that Koch's laws for the determination of the infectious nature of a given disease are valid here, for these forms, since they may not fully apply to such varied conditions. Nevertheless, we may still hold to them until they are proven invalid.

For that matter, we have almost complied with these canons in our Buffalo investigations. In almost every instance we have found organisms in cancer cases; and in practically every instance by the introduction of cultures made from these organisms we have produced fatal results in animals, although we cannot truthfully say that in every instance we have produced distinct carcinomata. We do not yet know that this can be done in animals by the forms which produce it in man. We know that syphilis and various other diseases are not communicable to animals, and in the beginning of this investigation we must not be too exacting until certain other conditions are also complied with. Where we have so far failed in complying with Koch's canons lies especially in this direction—that we are unable yet to say that wherever we find the organism we find the disease. We do not yet know the cancer organism well enough to be able to identify it outside the human body, and, therefore, while this requirement has not yet been complied with, neither has it been constantly violated.

I have often heard it adduced as an argument against the parasitic theory, that the duration of cancer is altogether too long to permit its recognition as an infectious disease. Such statements as these have nothing to justify them. I may be pardoned for calling attention to this fact which I have stated before, because of its importance in this connection. Infections follow no known limit or time law. There are some which are exceedingly acute, like cholera, bubonic plague, etc.; they kill in a few hours. There are others which run their course in a few days, like pneumonia, tetanus, diphtheria, etc. Still others extend over a period of a few weeks, like typhoid fever and glanders. The time in yet others is only measured by months. This is true of actinomycosis and of tuberculosis, whereas some instances of the latter disease and syphilis extend over years. No matter how long their course may be, we do not decline to see evidences of infection therein, and so the argument against the infectious nature of cancer because it lasts sometimes so long must fail. Cancer certainly is often as rapid as tuberculosis, even of the acute miliary form, and is usually more rapid than are syphilis or leprosy.

But, some one may ask, what about the failure of numerous experimenters to reproduce the disease by inoculation, or by implantation? I grant quite readily that until very recent times there has been almost complete disappointment in efforts in this direction. The disappointment, however, has not been so comprehensive as in the case of syphilis, since every effort in this direction has failed, and yet we do not deny the infectiousness of syphilis on that account. Because of the paucity of successes in this experimental work there attaches a certain suspicion or uncertainty to every alleged successful experiment. For me, however, as remarked above, one instance of cancer following the use of an instrument along the track which it has made is of very great value, far greater indeed than, on the other hand, would attach to 100 failures at deliberate implantation. Failure does not prove that success may not be finally attained, whereas one positive success is indisputable. Surely, clinical observation has amply established the possibility of infection with cancer. Once that be granted, the principal contention is maintained. Failures in times past have been largely due to our ignorance regarding the biology of these minute organisms, and the conditions which favor their life or death. In our laboratory work, for instance, in Buffalo, it has been discovered that they grow best in an exceedingly weak solution, and that ordinary bacteriological methods and culture media are absolutely inadequate. We have had best results in culture experiments by the use of an expedient suggested by Drs. Gaylord and Clewes in the use of collodion sacs. A little capsule is made of collodion; this is filled with cultures or with fresh fluids; it is sealed with collodion, then dropped into the peritoneal cavity of an animal. The organisms cannot escape through the collodion, but there is sufficient osmosis of the living fluids surrounding the sac to permit them to grow, under natural conditions, and they thus undoubtedly grow in the living animal without possibility of escape. Under these circumstances, their virulence is very much enhanced, and it is found that of its contents after removal of this sac from the first animal and inoculation into the second animal, they will produce a very rapid hematogenous infection, with nodular formation in various parts of the body, corresponding exactly to acute miliary carcinosis, the nodules thus produced often having the minute character of adenocarcinoma.

It certainly is not too strong a statement, then, if I claim that in the Buffalo laboratory Dr. Gaylord and our staff have absolutely produced adenocarcinoma by inoculation in a number of animals, and that this can now be produced in such a way as to afford unmistakable evidence of the infectivity of the disease.

When asked for a minute description of these organisms, it can scarcely yet be given. It must be enough for the present to say that they appear to belong to the protozoa, or possibly, as Schüler has hinted, to some still lower or less known animal form. They can be seen to undergo ameboid movement upon the warm stage, and careful study will reveal numerous changes which they undergo somewhat slowly, by which very positive and somewhat remarkable alterations in size, shape and general appearance are brought about. This would appear to take them out of the realm of the vegetable kingdom, and put them in that of the animal kingdom, and for the present it is enough to call them protozoa. Minute description or detailed statements can hardly be made yet, since they have to be most carefully studied, and, in fact, the whole matter of the biology of these lowly forms of animal life has to be gone over again before one talks too much about them.

There seems to be the most absolute resemblance between results obtained in the Buffalo laboratory and those just published by Max Schüler. There is scarcely a statement which he makes which is not corroborated by our own experiments. It seems to me that the statements of Schüler take away almost the last element of doubt which can remain as to the propriety of our conclusions regarding the parasitic nature of cancer.

Of course, it is yet too soon to formulate any conclusions regarding its treatment or therapy. For the present, at least, cancer must remain, as it always has been, a surgical disease. I believe this general statement can be made, that if cancer can be recognised early in accessible parts of the body and be removed thoroughly, it can be absolutely cured. Unfortunately, early recognition is rare, and thorough removal too infrequent. Consequently, we have the present hideous picture of the disease displayed before the profession. For cancer in inaccessible parts of the body, diagnosis must necessarily be late, and operative treatment can benefit little, if at all. If, however, we can establish a parasitic cause and cultivate a sufficient acquaintance with the organisms at fault, it is not too much to hope that some agent, be it vegetable or mineral drug, or animal antitoxin, may yet be discovered by which the ravages of the disease may be checked or prevented. Drugs are known which destroy the protozoa that cause malaria. Let us hope that something may yet be found, and that speedily, which may have the same destructive effect upon the parasites which produce cancer, without being inimical to the animal cells of the human body. Until this can be brought about, cancer is still a surgical disease.

510 DELAWARE AVENUE.

THE PREVENTION OF TUBERCULOSIS.[1]

By B. G. LONG, M. D., Buffalo, N. Y.,
President of Buffalo Society for Prevention of Consumption.

WHEN we appreciate its prevalence and frightful mortality, no argument is necessary to show that the prevention and extermination of consumption is one of the most weighty questions which confronts the medical profession today.

In our city, in the year 1894, there were 605 deaths from tuberculosis reported, including those reported as chronic bronchitis, congestion of lungs and hemoptosis, out of a total mortality of 5,280, or about 1.1 per cent. In 1893 the deaths from the same cause were 632, out of a total of 5,711, or again about 11 per cent. If we should have all cases otherwise named, which are in fact tuberculous, included the rate would be very materially increased.

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[1] Read before the Medical Society of the County of Erie, June 11, 1895.

In the same years, 1894 and 1893, there were 203 deaths from diphtheria, including croup, in the former and 223 in the latter, or about one-third of the number due to tubercular diseases. We thus see that the mortality is three times greater from tuberculosis than from diphtheria, which has received so much attention from the profession as well as from health authorities and legislators with telling effect. In order to ascertain the prevalence of consumption, we will assume that the report of the secretary of the State Board of Health, that its average duration is two years, is correct. On that basis, if we add together the deaths from consumption for 1894 and 1893, which is 1,237, we will have the average number of cases of the disease at any one time.

In the month of April, 1895, there were only 38 cases of diphtheria, including croup, reported. If we allow one month as the average duration of this disease, we had approximately for that month 38 cases of diphtheria to something over 1,200 cases of consumption.

That consumption is contagious through the medium of the tubercle bacilli, found principally in the sputum, is now generally accepted by the leading men of the profession, although the general public are still densely ignorant on this question. For hundreds of years some physicians have believed that consumption was contagious, basing their belief on the instances where a husband or wife, previously healthy contracted the disease in some way from the other who was consumptive, and also where healthy nurses contracted the disease after closely attending a consumptive for a long time. We have, also, the history of legislation against its spread, over 100 years old.

In 1782 the sovereign of the Kingdom of Naples issued a decree relating to tuberculosis, containing seven propositions, in substance as follows: (1) When the physician had established that there was ulceration of the lungs in any case, he was to report the patient under penalty of 300 ducats for the first offense, and banishment for ten years for the second offense. (2) The authorities were to make an inventory of the clothing found in the patient's room, which was to be identified after his death. If any opposition was made, the person offering it was to have three years in the galleys or in prison, if he belonged to the lower class, three years in the castle and 300 ducats if he belonged to the nobility. (3) Household goods which are not susceptible to contagion were to be immediately cleansed, while those susceptible were to be at once burned. (4) The authorities themselves were to tear out and replaster the house, alter it from cellar to garret, carry away and burn the doors and wooden windows and put in new ones. (5) The sick poor were to be at once removed to a hospital. (6) Newly built houses could not be inhabited for one year from their completion, and for six months after plastering had been finished and repairing done. (7) Superintendents of hospitals must keep in separate places clothing and bedding for the use of consumptives.

Other severe penalties were threatened to those who bought or sold articles which had been used by consumptives, and to any transgressor whomsoever. The results following this decree were wonderful. It is estimated that in 1782 the mortality from tuberculosis in the Kingdom of Naples was 10 to each 1,000 of population. In 1887 the official statistics for the Neapolitan kingdom showed that the death-rate from all forms of tuberculosis was only 2.05 per 1,000.

The germ theory being unknown at that time, and other means of diagnosis being crude, an early recognition of the disease was unusual, and consumptives were not pronounced such until well along in the disease, as is still often the case with practitioners who are either unable to make an early diagnosis or hesitate to alarm the patient or his friends until forced to do so by the gravity of the case.

It remained for Koch in 1882, however, to establish the fact that the tubercle bacilli is the active agent in the spread of this scourge, and also make it possible to diagnosticate pulmonary tuberculosis in almost every instance in its incipiency.

In our study of this subject we are not only to consider means to prevent the spread of the disease from the infected to the healthy, but also means to check the progress of the disease in the infected individual.

Dr. Nuttall, of Johns Hopkins Hospital, counted 4,312,581,280 bacilli in the expectoration of a consumptive in twenty-four hours. Heller claimed that a person with consumption would expectorate 7,200,000,000 of bacilli in a day, and that in a dried state they would live over six months and in a moist, putrefying substance 43 days. This may be overdrawn, but whatever the number and their longevity, the fact remains that with 1,200 cases in our city, practically unrestricted in any way, there are enough living bacilli floating about in the air to infect every susceptible citizen as well as the stranger within our gates.

When we consider the fact that cases of that dreaded disease, diphtheria, are ordinarily of short duration and that the patients are confined to the house and usually to their beds, and the danger of contagion being common knowledge, patients were in a large measure isolated even before the important placarding of houses was inaugurated; and, on the other hand, we know that tubercular diseases vastly more numerous are, as a rule, slow in their progress, and that from the first, long before the victim gives up his business or social engagements, he is measurably a source of contamination and a menace to all with whom he associates, and when we realise how ignorant the public and even many physicians are of the danger of contagion, can we appreciate in some degree the importance of this subject.

What has our State Board of Health done towards the extermination of this disease? They make the boast that we are the first state to inaugurate measures to exterminate the disease from our herds, and have secured appropriations for this work and have carried it on to such an extent that a 500-page book is required to give the report upon that work for 1894. The same report gives the number of deaths from consumption reported as such in the year 1894, as 13,123, surely far short of the actual deaths from tuberculosis, and yet I am unable to learn that one word has been uttered by this board warning the public of the danger of its spread amongst human beings.

Thus far the State of Michigan, is the only state to adopt measures against the spread of this disease, excepting from animals. Its State Board of Health adopted the following resolution September 30, 1893:

> *Resolved*, That hereafter consumption—and other diseases due to the bacillus tuberculosis—shall be included in the official list of "Diseases Dangerous to the Public Health," referred to in sections 1675 and 1676, Howell's statutes, requiring notice by householders and physicians to the local health officer, as soon as such disease is recognised.

And in these cases the local boards and health officers were to use their own judgment as regards the isolation and control of each case. The state board has also petitioned the legislature for a state hospital for consumptives, and is freely circulating printed information and instructions against its spread.

The health departments of many of our cities are alive to the importance of taking decisive action toward exterminating this disease. In New York City circulars and bulletins are circulated in different languages to inform the public of its dangers, and also calling attention to the curability of the disease, if properly treated in its incipiency. The health department is also equipped to disinfect contaminated articles free of expense, and will send inspectors to instruct the family, where the disease exists, in methods to prevent its spread, if so requested by the attending physician. The department is also prepared to examine sputum for tubercle bacilli upon the presentation of specimens.

In Philadelphia the health department is prepared to disinfect contaminated articles at a small fee and is disseminating literature. In the latter city, also, under the inspiration and presidency of Dr. Lawrence F. Flick, a society for the prevention of consumption has been organised, which has in its membership not only physicians, but any person who pays $1.00 or more into its treasury shall be a member for the year thus paid for. Its objects are largely educational, both to the affected individual and to the public, so that the health department may be supported in its work and proper laws enacted and enforced. It also furnishes hospital treatment to poor consumptives so far as it is able.

Dr. Flick recommends the formation of similar varieties in other cities, and I believe the suggestion a good one. I am of the opinion that such a society in our city would soon become popular, and would accomplish very much in the way of properly molding public opinion in its attitude to this question.

Through the efforts of some of the members of this society, Erie County is now erecting a separate building for the isolation and treatment of consumptives, which is a step in the right direction. Already our health department is prepared to examine sputum, and I am informed that they are continually called upon to do it. Preparations are also being made to institute active measures against the spread of this disease, by this department.

As an early diagnosis is of the utmost importance in the control and treatment of consumption, an ordinance, or still better if possible, a state law, should be enacted, making the reporting of even suspected cases of this disease mandatory, and placing them under the inspection and supervision of the health authorities. The sputum of the suspected individual, and also of every member of the household should be examined by the department bacteriologist. Cases that are well advanced in the disease should be sent to special hospitals unless they can be properly cared for at home without risk to others. Incipient cases, where the patient is still able to work, or care for himself, should, if possible, be induced to go to a more suitable climate, where his chances for recovery would be greatly increased.

Our aim should be, especially among the poor, and it is here that we find the disease most prevalent, to have them go to a suitable climate early, when they are in comparative health and are able to earn their livelihood and care for themselves. After a patient is bedridden or nearly so and requires a nurse or attendant, traveling is out of the question, for those who have little or no means, and it is to this class especially that I wish now to call your attention.

The greatest obstacle today, in my judgment, in the control and treatment of this disease intelligently, and in accordance with the recent advances in its study, is our inability to send those without means away to a more congenial climate.

Recent investigations by foreign physicians who sent commissioners to various countries of the globe, showed the Rio Grande region of New Mexico to be the section presenting in the highest degree the necessary conditions for combating consumption and allied diseases. Here it is that we find nearly continuous sunshine and a dry atmosphere. Mr. W. S. Burke, the United States weather observer at Albuquerque, N. M., states that not above two days in three years occur, in which the sun is not observed for the entire day at that station. The rainfall not only in New Mexico, but all of the Rocky Mountain region is very light. Undoubtedly many patients have been sent to Colorado and other resorts in that region by members of this society, who have been greatly benefited thereby. I have had two cases within six months that have stimulated me to a study of this subject. Both were given careful physical examinations by members of this society of recognised ability, who reported in both instances their inability to detect any signs of lung trouble. I found the bacilli numerous in both cases upon examination of the sputum, and had my findings verified by the city bacteriologist. One patient had means and was sent to Colorado, where he is doing well. The other one was financially unable to go away and has been obliged to remain here and work for a living. The latter is improved in health and may recover, but I think the chances for recovery are very much less for the one remaining here than for the one now in Colorado.

Throughout the Rocky Mountain region, and also in our Adirondacks, there are sanitariums where people of means can be well cared for; but what are we to do with our poor patients? To send our patients who have no means out west among strangers, where at the present time employment is almost out of the question, on account of the stringent times, which are felt more there than here, and have them suffer more from lack of food and shelter than they gain by the change of climate, so that finally they would become public charges upon an already overburdened community, ought not to be thought of.

Before sending such patients away, work must be provided for them whereby they may be self-sustaining. If work can be guaranteed them with the chances of regaining their former health immeasurably increased, we will have little trouble to get them to carry out our wishes.

I am satisfied that the providing of such work is not an unsurmountable difficulty, for fortunately since the system of irrigation has been so successfully adopted in that section, immense tracts of land have been brought under cultivation, and with such absolute control of the water supply the land produces two or three crops each season, and it therefore requires a comparatively small plot for an individual to work in order to maintain himself.

In a recent conversation with a gentleman who is largely interested in irrigation in Southern Colorado, where their company have 5,500 acres under irrigation, I am informed that such land can be bought for $40 per acre, with perpetual water rights. Land could in all probability be leased for a term of years at a very reasonable figure, with the privilege of purchasing at any time.

Our state is providing a colony for epileptics and is constantly caring for the insane. Why should it not establish colonies for consumptives in various desirable health resorts? Why is it not perfectly feasible to establish such colonies in suitable localities where under stringent medical supervision those of small means might be sent while still able to work and where, in outdoor occupation, in the pure air and sunshine, they might earn a living, and thus freed from worry and homesickness, regain their health. Such a colony ought to become self-sustaining in a very short time, for no one should be sent there who is unable to work.

In England, the Salvation Army has engaged in a somewhat similar undertaking at the mouth of the Thames, to provide homes and employment for the poor of London, but on a soil which is much less productive. I am told by an officer of the army that it has passed the experimental stage and, at the present rate of productiveness, will be self-sustaining in a very few years.

A small colony might be started in an experimental way by a society, or city or state, under proper medical supervision and control, so that all sputum and other contagious excreta would be destroyed. This colony could be added to from time to time by additional land or the establishment of industrial enterprises for the employment of the various trades, and others could be established in higher and lower attitudes in that region to suit the requirements of individual cases.

I have purposely avoided any reference to treatment by drugs, and the detail of restrictive measures, but have tried to show the reasonableness of the following conclusions:

1. The contagiousness of consumption being practically admitted, its prevalence and terrible mortality make the study of its prevention the most important question before the medical profession to-day.

2. That legal enactment should require the reporting of all cases to the health authorities, who should be authorised to inspect such cases and supervise their control, and also compel all members of an infected household to have their sputum examined by the city bacteriologist.

3. That societies similar to the one now existing in Philadelphia for the prevention of consumption should be formed to interest the public in and educate it upon this important question, and to coöperate in every way possible with the health authorities in the discharge of their duties.

4. That all cases that are well advanced should be placed in suitable hospitals, if not so situated that they can be cared for at home without the risk of infecting others.

5. That all patients with consumption detected in its incipiency should be urged to go to a favorable climate, and that colonies should be established—ultimately by the state—where those who have no means could be employed at out-door work to maintain themselves, such colonies to be under rigid medical supervision.

NOTE.—On March 23, 1901, a sanitarium along lines suggested in my paper, "The Rocky Mountain Industrial Sanitorium," was incorporated at Denver, Colorado, with Hon. Wm. H. Gabbert, Associate Justice Supreme Court of Colorado; Hon. Charles Hartzell and A. M. Holmes, M.D., as incorporators.

It is intended that people of little means shall be received and cared for at cost, with an opportunity for them to engage in such light employment as they are able to perform to assist them in their maintenance.

Strict medical supervision is to be enforced so that all sanitary matters are perfect in every detail. Medical men should investigate this institution when considering the disposition of incipient cases of tuberculosis. The prospectus of the institution is now ready for distribution.

520 ELMWOOD AVENUE.

HOW ARE WE EDUCATING OUR CHILDREN?[1]

BY A. W. BAYLISS, M. D., Buffalo, N. Y.

ONE of the most important duties of our life is the proper education of the young. To educate them properly not only mentally but physically should be our aim. It has often occurred to me within the past ten years that we are too one-sided in our work in that line. In the days of our forefathers the education they received was such as better fitted them for the battle of life that was before them; that is, they were more able to stand the rough and almost turbulent life into which they were to enter than are we of today. Perhaps you may think me something of a pessimist, but I trust I am not; I think there are few who take a brighter view of life than I do. If we were all to let affairs rest as they are when we think they may be improved, without adding our mite to change them, I fear we would wear the ruts pretty deep, so deep it would be hard to leave them.

Since the formation of the world there have been the different ages and this seems to be the age of education; but it appears to extend only in one direction, which I think is a mistake. I would not have the young of today necessarily athletes, yet if they are and turn toward innocent athletic exercises, I think that is one way of developing manhood and I was going to add womanhood, but that is carrying it almost too far, so we will stop at girlhood, the proper teaching of which should most certainly be in our public schools. It should not be optional but obligatory upon all, unless for certain reasons a scholar may be excused. How often are we called to attend the child who, as one teacher very tactfully put it, "does not study too much but exercises too little," one who is on the verge of breaking down under the strain to which they are subjected? It may be in one form or it may be in another, but easily traced to the cause which is debilitating our young. When the child has spent several hours in study he feels but little like exercise, no matter how much good it may do him to stir about in the fresh air, of which we get but little in a city of this size. If he can find the couch or bed he feels more like occupying it than taking the necessary exercise.

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[1] Read before the Section on Medicine, Buffalo Academy of Medicine, April 9, 1901.

How seldom if ever are we called to attend the child in the lower walks of life for this disease. I don't mean the middle-class, but the lower, those who must help to earn the living that they have. Some may say these children are dull and not capable of being wrought up to that stage of excitement, if you please, that their more lucky neighbors are, yet their teachers all speak well of them as to their brightness and capability of learning, and how many of them do we see that become prosperous business men? No, the reason is they are not like the fruit tree grown in the forest, whose branches may reach far enough above its more humble brother in the orchard to overlook a vast expanse of territory, yet of what use is it, it being so exposed in its weakened form it cannot withstand the storms of life as well as its brother, and often the fruit that it should bear blasts for want of nature's most necessary element, strength. And if fruit does form upon this weakling, it is apt to be like the parent from which it came, tender and liable to be ruined by the storms which it certainly must encounter. I would not take from the present hours of study of our schools, but rather add to, by, as I said before, adding to each school a systematic course in physical development; not a brief ten to fifteen minutes, but a sufficient time to develop the physical system to the same level that the mental is. Some may say they have not the time, but who of you that cannot do more mental work in one hour when you are fresh and your mind clear than you can do in three or four times that length of time when tired. Therefore I would divide the time differently, taking from the hours of study enough to give a sufficient time for exercise, and have properly qualified teachers to teach the subject. I am told that a certain amount of exercise in the schools is compulsory, but the time is too short and those who teach it are not qualified to do so. I speak of the majority of teachers.

Dr. E. A. Edline, before the Illinois State Medical Society, read a paper last May upon Physical Culture in which he considers it necessary for the young, as the present state of affairs tends greatly to weaken the race, to which I think you will all agree. Also Mr. Beitzel, Principal of the Mechanicsburg school, read a paper before the associated health authorities, in which he recommends medical inspection and considers that we are developing the mental powers at the expense of the physical system. In several cities they have physicians appointed to inspect the schools, but their work is confined to the prevention of contagious diseases, examination of the sight and hearing, also sanitation.

In some of the German cities, they have the same inspection, but it is, generally speaking, in an experimental stage, being a success so far as they have gone with it. But I fail to find anywhere that they have anything in the line of inspection in regard to the physical needs of the child. Why would it not be well to have inspectors appointed who are qualified to say what form of exercise a child should take? Perhaps instructors in physical culture would be qualified, but I fear they would be inclined to overtax the child in their enthusiasm to accomplish much; and, again, they would not understand so well the condition of the child's system; therefore, I would advise the appointment of physicians who are specially qualified for the work. In nearly all cities where they have inspectors at work there is a certain amount of clashing between the health authorities and the school department. I think perhaps the reason of this is the school department fails so often to see the necessity of suspending the child from school; but this in time will be overcome and I think the two departments will work in unison.

As the wheels of all public machinery—especially these departments—move slowly, I think it quite necessary that some action be taken in this matter, and I trust a discussion of this subject will be entered into this evening. I have purposely made my paper short that all may express their opinion upon this, I think, vital question. I, as you see, have omitted to speak of the sanitary condition of the schools, for the reason that the question is being agitated now, and in due time will be presented to the public.

HOW TO STUDY.

After speaking with several teachers, I find they all say they do not crowd their pupils but rather hold them back; but any fair, liberal-minded person I think will see that this is not so. From the time the child enters the kindergarten to the time he leaves the high school, it is a continuous process of craming or developing grey matter. The same brain cells are not brought into use in the study of one subject that are in the study of a different one, yet the child is at all times under the same mental strain when at work. I spoke of the child in the kindergarten as being hurried through life. If you doubt that, look at the little tots as they come from school with tears in their eyes, when they have been told that if they did not do better they would have to go back into a lower class or remain in the class they are in while their more fortunate companions are promoted, and tell me then that they are held back! This is a picture that may be seen quite often these days. This same process of teaching is seen throughout school life only in different degrees, as the teacher is more or less ambitious for her well-being and situation, also her future advancement, for we are measured by our failures as well as by our victories; so it behooves them to do their best if they expect to prosper in their chosen field of labor.

Instead of this process of grinding, I would have more time spent in teaching them how to study. Not so much to work, but how to work. Of course, the present text-books are much plainer to the child than were the old ones. Compare the old Brown's grammar from which the beginner graduated in time with the present text-books on language. Now the pupil goes step by step to the more advanced subject. Yet the technical way to study is not taught as it should be. How often do we see the girl or boy sitting listlessly over their books with thoughts far away, yet call this study, when if they knew how to work, for work it is, how much less time would be spent over their books than now. What would we think today of putting a teacher into a school, no matter how learned he or she may be if they were not taught how to teach, yet we expect the child to grasp the lesson in his undeveloped state. Therefore let us teach the child first how to study and then when to study.

The present system of marking the standing of pupils should be abolished, also all honor rolls, and instead a private record kept in each school or room for reference, and when one falls below a certain per cent., the parents should be notified and requested to spur up the careless child, if careless he is, instead of making it public before the whole school and neighborhood and holding the child up to the ridicule of his mates, which must act to discourage many, for who of us can stand a continued faultfinding without becoming discouraged? And how much more vim and life it puts into us if we are led to think we sometimes do something worth commending. If it acts so on us it certainly must do the same with the child, for the only difference between us is we are a little larger than they and have seen a little more of life. Then the child is not so much educated by this system that we have in use now. Up to the time the child commences to take the regents' examinations there is more of a general education; but when that begins, the child's attention is directed more especially upon the study in which he expects to take an examination, and there is a continuous drill upon that subject until they pass it, and what can be worse for the child than this form of study? It does not teach the principle only so far as it is necessary to pass. Not only the sin of omission is seen here but the sin of commission also, for you will all allow, I think, that a child kept under this continuous strain must be debilitated and weakened, when if this were different the child would have less to worry about as well as be better prepared for that which is to come.

For my part I cannot see what need we have of the board of regents in a city of this size. They issue certificates which are an educational legal tender in this state, but of no use elsewhere. A child spends twelve to fourteen years for one of these certificates, and then is told if he wishes to enter a college outside of the state that he must pass an examination. How would you like to work the same time for a few dollars that you must spend in this state, resembling the old bank notes in use years ago, when if you entered another state you must have your money changed to that which was legal tender there? No. If we cannot have a legal tender for our entire country, I would ask to be as a city released from the supervision of the regents' board, and set the standard high, so high by doing away with the monthly, and if possible the term examinations, and having a final one; that when our boys and girls go to another state to enter a college or university, they would have the pure standard metal that would shine not only at home but wherever they may be.

592 SPRING STREET.

MALARIA REPRESENTING THREE VARIETIES OBSERVED IN BUFFALO.

By JULIUS ULLMAN, M. D., Buffalo, N. Y.,
Instructor of clinical medicine, Med. Dept. University of Buffalo; attending physician German Hospital; attending physician, University of Buffalo Dispensary.

IN A paper recently published by Lyon and Wright (BUFFALO MEDICAL JOURNAL, November, 1900), on An enquiry into the presence of malaria in Buffalo and its environs, the authors conclusively showed that malaria is a rare disease in natives of Buffalo. Whatever cases of malaria fever have been observed of late in Buffalo were imported, and more especially noted in those soldiers returning from the tropics, particularly from Cuba. The cases usually noted belong to the tertian or quotidian types, but occasionally the more pernicious form is seen—namely, the estivo-autumnal variety.

It is now agreed (Malaria, Encyclopedia Medica, Vol. VII.) that there are various species of malarial organisms which will only reproduce their kind, each of which is capable of reproducing the respective varieties alluded. It is also shown that the organisms have two cycles of reproduction, asexual as seen in the infection of the human species, and an extra- or asexual, having the mosquito as the intermediary host. The crescent bodies, those organisms first described by Leveran, are seen in the estivo-autumnal fever.

The following illustrative case is reported, showing the malarial cachexia, and the enormous hepatic and splenic enlargement of a case of estivo-autumnal variety of malarial fever.

P. J. B., aged 30; Irish and a teamster; was admitted to the German Hospital, May 9, 1901.

Family history.—Father and mother are both living and well; two sisters and six brothers are alive. There is no obtainable history of tuberculosis, syphilis, diabetis mellitus or rheumatism, nor have any relatives ever died of cancer.

Past history.—Patient has had measles and diphtheria; eight years ago had typhoid fever. Denies having had any specific disease. Has used alcohol freely.

Present history.—In 1898, patient went to Cuba and was engaged with the army, his duties calling him to different parts of Cuba. He remained in Cuba until April, 1901. During the first year and a half, the patient enjoyed good health, but after this period, while in Porto Principe and Santiago, he had chills and fever, for which he took large quantities of quinine. At the time of his illness, he became suddenly dizzy and vomited freely. He had no appetite, was chilly and had a rise in temperature; the bowels were constipated and he suffered severe headaches. This attack lasted four days and following it, he had illnesses of the same nature, but of more or less severe character. An aura was present in the majority of attacks and consisted in a burning or tickling sensation in the feet, severe thirst and headache and general feeling of tenderness, particularly in the region of the kidney—so-called by patient, but more probably the spleen. Frequent micturition, particularly at night, was a frequent symptom. Nausea and vomiting were not infrequent. When the patient was indoors or in the shade, the attacks occurred less frequently; while the heat and sun seemed to precipitate a paroxysm. The paroxysms were most prone to occur after dinner, at 2 or 3 o'clock p. m., and abate when the coolness of the evening came on.

When in Cuba the patient took very large doses of quinine, often sufficient to produce a temporary deafness, with but slight effects upon the disease. His condition improved slightly on his leaving Cuba, but mild paroxysms still continued.

Status presens.—The patient is of good bony frame, but is anemic, and evidently has lost much weight and strength. His face moderate number of macrocytes, poiklocytes. A differential count of the whites give: polymorphous leucocytes, 72 per cent.; small lymphocytes, 21 per cent.; large lymphocytes, 6 per cent.; eosinophiles, 1 per cent.; total, 100 per cent. There are no plasmodia malaria and no increase of fibrin.

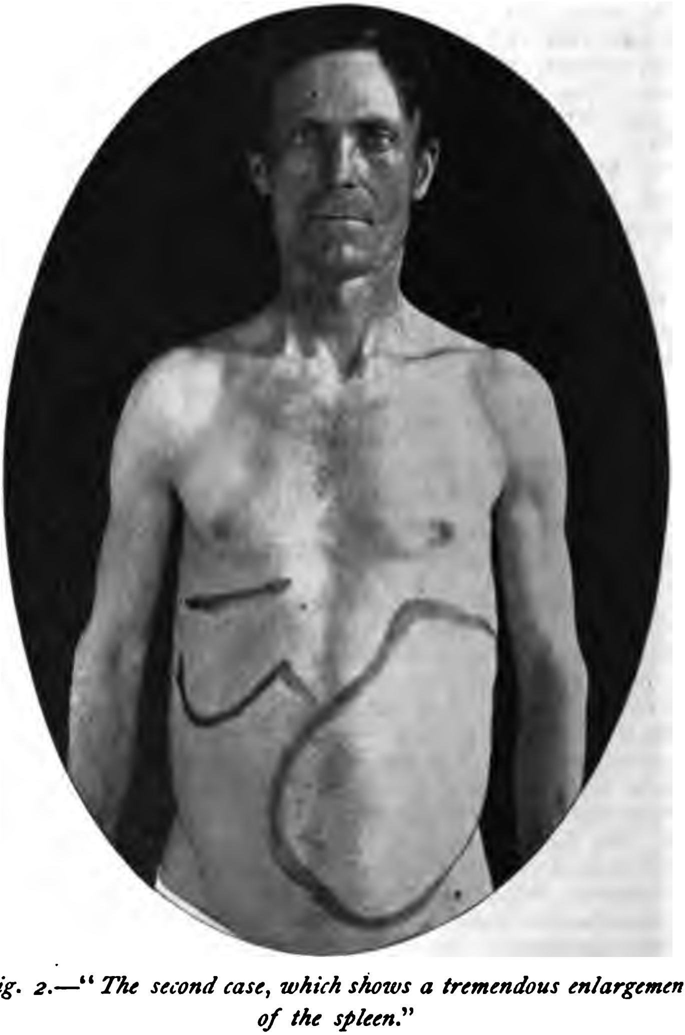

Fig. 2.—"The second case, which shows a tremendous enlargement of the spleen."

This accords in many respects, especially in the blood examination to splenic anemia, described in Allbut's System of Medicine,

p. 539, as "a form of profound anemia, progressive in character, ending fatally; generally of no long duration, associated with great enlargement of the spleen, but without leucocytosia or enlarged glands. It has also been called splenic cachexia, splenic pseudoleukemia, lymph adenoma splenicum and splenomegaly primitive." This case agrees with this description in (1) the anemia; (2) the enlarged spleen; (3) the absence of leucocytosis and enlarged glands elsewhere, but there seems to be a causal relation from his history to malaria, and so we must further regard the great enlargement of the spleen to chronic malaria, and the small size of the liver to a simple or marantic atrophy, often seen in chronic malarial cases. The blood count, though the malarial organism has not been found and which is not so unusual in the chronic cachectic cases, is a picture of a chloro-anemia, due to the chronic malarial intoxication.

Our case, then, presents well the clinical and blood picture of a splenic anemia with the additional factor of malarial origin.

A third case, which shows a typical attack of tertian malarial fever, and which is of especial interest to us from the fact that the patient has never previously had an attack of malaria, and has lived in Buffalo continuously for a year, is as follows.

B.F., aged 21; German; came to the medical ward of the German Hospital, June 5, 1901. The family history is negative. Patient has had the exanthemata, and since childhood has been very well. He lived in Berlin, Germany, 17 years, and then accepted a position as fireman on an ocean steamer. He traveled from America to Hamburg and back as fireman for one year. Following this he traveled between Australia, Hamburg, China and Brazil and during the entire career was only troubled with seasickness. Upon entrance to hospital patient had temperature, 103; pulse, 130. He complained of chills, fever, nausea and vomiting. He was constipated; both liver and spleen were enlarged, the latter being palpable; the tongue was coated and furred.

To our astonishment the temperature was normal on the following day, June 6, when at 10 a.m. of the 7th, being the same time as rise of June 5, he again had a paroxysm; a calm on 8th and a paroxysm at same hour on 9th, so also on the 11th.

The blood was examined and the plasmodium malaria found, when quinine was given, since which time his temperature has remained normal and no further paroxysms have occurred

400 FRANKLIN STREET.

PHYSIOLOGY OF THE KIDNEY.

A LECTURE DELIVERED TO THE CLASS OF NURSES AT BUFFALO HOSPITAL OF THE SISTERS OF CHARITY, APRIL, 1901.

By BYRON H. DAGGETT, M. D., Buffalo, N. Y.

PHYSIOLOGY treats of function; anatomy treats of structure. The dead body, recently dead, presents the anatomy intact, its physiology, its function, its vital phenomena, its life is gone forever. Chemical forces assume sway and literally render dust unto dust.

The kidneys are the great eliminative organs of the body, constantly rejecting the poisonous waste of metabolic change. The kidneys separate from the blood excrementitious matters, which are of no further use in the economy and are simply to be discharged from the system. The kidneys, the skin and the liver are the excretory organs of the body; the liver, however, is both a secretory and an excretory organ for its product is, in part, eliminated as a waste, and in part, appropriated for further use in the system.

A secretion is formed from a membrane or gland, for use in the economy, such as serous and synovial fluids, humors of the eye and ear and spinal cord, mucus, sebaceous matter, cerumen, milk, saliva, tears, digestive juices, and the like.

An excretion is a substance separated from the blood by glandular action for elimination as a useless product.

Urine is the type of excrementitious fluids, and is retained in the bladder, as a matter of convenience. The relations of urinary excretions with nutrition and disassimilation are very interesting and important. It is well, perhaps, to preface the consideration of the special study of the physiology of the kidneys with a brief outline of the general subject. Reviewing the subject sets ajar the door of memory, through which I get a whift of my student days, and I will tell you some of the things that were told me then:

Physiology is the study of the vital phenomena of organised matter or living beings. Organised matter is arranged as it is by vital forces. Organic matter is the product of organised forces; all matter belongs to the inorganic or organic kingdoms.

The organic and inorganic bodies differ in origin, in mode of increase, in duration and in form.: (1) The inorganic is arranged by chemical forces—as a mineral; the organic is arranged by vital forces—a leaf. (2) The inorganic increases by accretion—a crystal; the organic by intussusception—a man. (3) The inorganic never had life—a stone; the organic is such by virtue of life—a tree. (4) The inorganic is never nourished—a rock; the organic grows by nourishment—a leaf. (5) The inorganic has no offspring—a pebble; the organic reproduces its kind—a fish, a man.

The organic kingdom is divided into the vegetable and animal subdivisions, and they differ as follows: (1) The vegetable appropriates inorganic matter; the animal assimilates only organic matter. (2) The vegetable absorbs matter as it finds it; the animal prepares it for absorption. 3 The vegetable assimilates and grows; the animal assimilates, grows and repairs waste. (4) The vegetable lives and grows; the animal lives, grows and perceives. (5) The vegetable grows; the animal expends its energies in growth, action, excretion and thought. The stone grows, the plant grows and lives, the animal grows, lives and perceives.

Life is a force in organised matter having power to manifest functional activity under favorable circumstances. Life then is functional activity.

The vegetable functions are common to vegetable and animal life. The animal has in addition the functions of relation, so-called perception, and the various manifestations of the nervous and muscular systems.

There are three groups of animal functions: (1) Those which relate to the growth and preservation of the individual—as prehension, mastication, insalivation, deglutition, digestion, absorption, sanguinefication, circulation, assimilation or nutrition, and excretion, and the type of an excretory organ is the kidney; (2) Those relating to the preservation of the species; (3) those of external relations, as the nervous and muscular systems.

The anatomist says that man is a bundle of tissues; the physiologist says he is a bundle of functions; the chemist says he is a compound of C, H, O, N, P, Chlo. Fl, H, Na, Ca. Mag, Fe, Mn, and Si, and the like. What is man?

The physiologist says that man is made up of four groups of proximate principles. A proximate principle or element is any substance, whether simple or compound, which exists in the body as such as can be removed without destruction—primary compounds which supply matter for others more complex.

A proximate principle: (1) is of organic origin, existing in the same form in the organic and inorganic kingdoms, as O, N, H_2O; (2) are non-nitrogenous elements of organic origin as starch, sugar, oil and compounds of C, H, O; (3) the tissue building or nitrogenised group composed of C, H, O, N as fibrin, albumin, stearin, cartilagin, pepsin, etc.; (4) or excrementitious group, formed by retrograde metamorphosis (disassimilation) cholesterin, urea, creatin, creatinin (C, H, O, N) Co_2. The simplest form of life is a single cell. These are unilocular, animals and plants.

Man is an aggregation of cells. All the tissues of the body assume their various forms through the agency of cells. The cell is the ultimate organic principle of organised matter.

Our organs are aggregations of cells and our bodies are aggregations of organs. Upon the well-being of the cell depends the well-being of the organ, and upon the well-being of the organ depends the well-being of the body. Out of this comes cellular pathology and organic therapy. The tissues of the body are built up from cells—a cell is a minute vesicle and has five typical elements: (1) a cell wall—a thin, transparent homogeneous membrane; (2) fluid contents; (3) minute granules in the fluid; (4) a nucleus—an aggregation of granules; (5) a nucleolus, a change in the nucleus to form a new cell.

Cells originate in three ways: (1) by free cell development—in a fluid—as blood corpuscles; (2) by an equal division through the middle; (3) division of its contents.

Cells assume various forms: (1) simply enlarge, as in glands; (2) elongate and make tubes—capillaries, etc.; (3) elongate and make fibers; (4) send out processes in various directions.

Cells exist: (1) Free in the fluids of the body, as blood corpuscles; (2) attached on free surfaces, as on mucus and serous surfaces, called epithelium. They are endowed with the power of forming new material and developing new substances.

This takes us to development and the study of the physiology of the individual organs.

(Continued in August number.)

723 ELLICOTT SQUARE.

REMOVAL OF THE FEMALE URINARY BLADDER FOR MALIGNANT DISEASE.[1]

BY MATTHEW D. MANN, A. M., M. D., Buffalo, N. Y.

THE author says the operation for removal of the bladder has not received enough attention in this country, there being very few cases on record. Cancer of the bladder is rare, but is the commonest form of growth found in the bladder. The diagnosis can be made by the symptoms, the use of the cystoscope, palpation, and the examination of the urine. Treatment may be removal through the urethra, the vaginal septum, or by suprapubic cystotomy.

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[1] Abstract of a paper read before the Section on Obstetrics, Buffalo Academy of Medicine, May 28, 1901.

The operations are the removal of the growth and its base; resection of part of the bladder, or cystectomy. Indications for total removal are multiple growths; return after removal; extensive involvement of the base; and extension of cancer of the cervix uteri into the bladder. The ureters need no attention at the time of the operation, as by the removal of a portion of the anterior vaginal wall, they will discharge into the vagina. If possible, the ureteric openings into the bladder should be left intact. This will rarely be possible. He does not believe in uretero-intestinal anastomosis.

The vagina can be used as a receptacle for the urine, as was done by Pawlik. If this be done, there will be little danger of infection traveling to the kidneys, as the newly-made bladder can be kept clean.

The operation is done in the Trendelenburg position. The peritoneum over the bladder being cut, the bladder is enucleated by the fingers, and the base, with the anterior vaginal wall still attached, is removed. The uterus is then removed, and the peritoneum closed over the floor of the pelvis.

Mann reports two cases, both of which recovered from the operation, and has collected from the literature fourteen cases more. He concludes that in certain malignant disease of the bladder, total extirpation is a justifiable operation, offering no serious difficulties to an experienced abdominal surgeon, and giving the patient a chance for a comfortable continued existence.

Society Proceedings.

BUFFALO ACADEMY OF MEDICINE.

REPORTED BY THOMAS F. DWYER, M. D., Secretary.

ANNUAL meeting held at the Academy rooms, Public Library Building, Tuesday, June 11, 1901. The president, Dr. MARCELL HARTWIG, called the meeting to order at 9 p.m.

The minutes of the last annual meeting were read and approved.

The secretary of the Academy and council presented the following report, for the session of 1900-1901, which, on motion, was received and ordered spread on the minutes:

ANNUAL REPORT OF THE SECRETARY.

To the Academy of Medicine:

Twelve applications for membership have been received and elected members during the past fiscal year, of which eleven were resident Fellows and one nonresident Fellow. Twenty-three members, twenty resident and three nonresident, have been dropped for nonpayment of dues, and one resignation has been received and accepted during the year.

The Academy has lost by death one esteemed Fellow, Dr. Frank W. Abbott, who died April 9, 1901.

The Academy was invited by the Medical Society of the County of Erie to participate in a special meeting to take action on Dr. Abbott's death, and at that meeting a committee consisting of Drs. Lucien Howe, De Lancey Rochester and Thomas Lothrop presented an appropriate memorial.

The plan of preparing a program during the summer for the entire session was so successful the past two years, that it was repeated for the session of 1900-1901, by vote of the council, and a copy sent to the members of the Academy.

The constitution and by-laws of the Academy have been revised and a printed copy has been sent to each member.

Only three regular meetings were held and entertained by the sections of the Academy: Section of Obstetrics, June 26, 1900, no quorum; Section of Medicine, September 11, 1900, Clinical quantative estimation of proteid digestion in the stomach, with demonstrations, Dr. A. L. Benedict. Section of Surgery, December 4, 1900, The closure and dressing of abdominal wounds, Dr. Stephen Y. Howell; Treatment of acute general peritonitis, Dr. Eugene A. Smith. Section of Pathology, March 19, 1901, A report of recent investigations of cancer, Dr. H. R. Gaylord; A case of organic epilepsy—clinical and pathological report—Dr. Henry P. Frost.

The meetings of the Academy have been attended as follows: at the September meeting, 21 were present; December meeting, 43; and at the March meeting, 53; an average attendance of 39. I am sorry to report that the attendance has been gradually decreasing for the past two years, not only at the meetings of the Academy, but more particularly at the meetings of the various sections.

The council of the Academy held four meetings, with an average attendance of twelve members.

Respectfully submitted,

THOMAS F. DWYER, Secretary.

The report of the treasurer was read by Dr. Charles S. Jewett. It was moved and seconded that report be received and referred to the trustees as an auditing committee. Carried.

The report of the trustees was read by the chairman, Dr. Benjamin G. Long. On motion the report was received and ordered filed.

Reports were received from the secretaries of the Sections of Medicine, Surgery, Obstetrics, Pathology and Ophthalmology, and were ordered filed.

The tellers, Drs. Blaauw and Borzilleri, reported the result of the election as follows: president, Dr. Charles G. Stockton; secretary, Dr. Francis W. McGuire; treasurer, Dr. Charles S. Jewett; trustee, Dr. Matthew D. Mann.

The retiring president, Dr. Marcell Hartwig, made a few remarks in reference to the work of the past year, and then read his annual address, entitled, Charity by proxy or semi-charity and its disastrous effects upon the physicians. (To be published.)

The auditing committee reported having compared the report of the treasurer with the books and vouchers and found them correct.

The newly elected president, Dr. Charles G. Stockton, was not present, but the secretary, Dr. Francis W. McGuire; treasurer, Dr. Charles S. Jewett, and trustee, Dr. Matthew D. Mann were presented and made brief remarks, thanking the members for having elected them to important offices in the Academy.

Dr. J. W. Grosvenor moved that a vote of thanks be extended to the treasurer for his work during the year. Carried.

Attendance, 32. Adjourned at 10.30 p.m.

Section on Medicine, May 14, 1901.

REPORTED BY JULIUS ULLMAN, M.D., Secretary.

THE last regular meeting of the Medical Section of the Buffalo Academy of Medicine for the season was held in the Public Library Building, Tuesday evening, May 14, 1901, with Dr. ELI H. LONG, chairman, presiding.

The order of business being election of officers for the ensuing year, Dr. Julius Ullman and Dr. Albert E. Woehnert were chosen respectively as chairman and secretary by unanimous vote.

Dr. JULIUS ULLMAN reported a case of estivo-autumnal malaria in a patient, aged 32, who had just returned from a long sojourn in Cuba. (See page 892.)

Dr. S. A. KNOPF, of New York, delivered an address on

THE RELATION OF THE MEDICAL PROFESSION IN THE XXTH CENTURY TO THE TUBERCULOSIS PROBLEM.

" Dr. Knopf first referred to the energy shown by the medical profession of this age in the treatment of the tuberculosis problem and spoke of the appreciative work of Villemin, who first showed the transmissibility and infectious character of tuberculosis; of Koch for the proofs of the microbic origin, of Cornet, who showed the infectiousness of tuberculous dust; and of Fränkel for his interesting experiments in drop infection. The low death rates from phthisis pulmonalis in the large cities (Paris 4.90, Vienna 3.81, New York 2.26, Berlin 2.19 and London 1.87 per 1,000 inhabitants is to be attributed to the science which the prophylaxis of this disease has reached.

The author alluded to the fallacious idea of the incurability of this disease, which was up to a decade or two entertained by the medical profession, and referred to the thesis of Herman Bremer, who dispelled the idea of its incurability. Bremer introduced the sanitarium treatment of tuberculosis, and not only cured himself, but thousands of others. His successor, Dr. Dittweiler, is also to be remembered for his rest cure therapy in the open air.

America is to be congratulated in not only giving the benefits of the rational treatment of consumption to the well to do, but also to the poor, for the first people's sanitarium for consumption, was begun seventeen years ago, under the direction of Dr. E. L. Trudeau.

The tuberculosis problem must be considered not only in a purely medical, but also in a social aspect. Without statesmen, a liberal municipality and philanthropy, its solution will never be approached, but the medical profession must do the bulk of the work. The physician must not only be a leader but a doctor that is a teacher, and should be well paid for his services. Even the poor should have his family physician, and if unable to pay the physician should be remunerated decently from the public funds. He proved the statement by statistics as to the cost to the state of the maintenance of incurable phthisical patients in the hospitals, as compared to the income such a person could make, provided his disease had been recognised in its incipiency, and undoubtedly cured, so that 75 out of every 100 consumptives would be prevented from becoming a burden to the community.

Under ordinary circumstances everyone is susceptible to tuberculosis, but it is the badly housed, underfed, overworked people, weakened by disease, intemperance and excesses who are the first to fall a prey to the tubercle bacillus; and as physicians we must insist that the dark, dreary, badly ventilated tenement and lodging house should disappear. Especial stress was paid to the underfeeding of the poor school child and some cities were quoted where suitable lunches are given to the child. In this connection the author spoke of the wisdom of the introduction of physicians to examine the children at school.

The author next spoke of the duties of physicians to patients in whom prevention is no longer possible because they are already tuberculous, and advised that every physician should be requested to report to the respective health authorities, the age, profession and residence of every tuberculous individual under his care and only in such cases where the patient or his family wontonly disregard hygienic precaution should the attending physician seek the aid of the health officer to enforce proper hygiene. Treat the consumptive, who is conscientious and does his very best to protect his fellowmen from infection with the utmost kindness, and do not let him feel as if he was an outcast from society.

Dr. Knopf emphasised the importance of educating the masses concerning this disease, congratulating Buffalo on the organisation of an antituberculosis society and urged the great necessity for the formation of a national antituberculosis organisation.

The organisation of a state sanitarium for the treatment of incipient tuberculosis cases in this state is meritorious, but as Da Costa remarked "it seems like a drop of relief in an ocean of woe." There should be a city hospital for consumptives, situated at not too great a distance from the city, and a special city dispensary should be established for the treatment of ambulant tuberculous cases. Besides this there should be a special institution foi the treatment of tuberculous and scrofulous children.

Dr. Knopf urged that the physicians and house staff of such institutions should be paid and that every community should have a tuberculosis commission.

DISCUSSION.

Dr. **Charles G. Stockton** congratulated Dr. Knopf on the intelligent and high-planed presentation of this important subject. He agreed with the doctor on the great importance of nutrition in poor people and said educational means should be adopted to protect ourselves, as well as the community from these cases of phthisis pulmonalis. Following the view of Dr. Knopf, Dr. Stockton favored the establishment of a national association, which will appeal to the laity, and which will educate the masses concerning the nature of the disease and the prophylactic measures to be employed to check its spread. He thought it would be a good move for the Buffalo Academy of Medicine to associate itself with the local antituberculosis society, and take steps toward the formation of a national society.

Dr. **John H. Pryor** stated that he was heartily in favor of a national antituberculous association, and believed that we should seek the coöperation of New York City physicians, and that an invitation should be extended by the Academy of Medicine of New York to join in the education of the masses on the subject of tuberculosis. Dr. Pryor is of the opinion that other things must be done beside educating. Papers have been published, showing the communicability of the disease, but little has been accomplished. Today the consumptive is abused and neglected. He suffers and gets no relief, because he does not get the proper climatic treatment, and often dies because he is poor. His case is not diagnosticated sufficiently early and because he is tuberculous he succumbs to a second pyemia. Dr. Pryor thought the profession and relatives often indulge in sentiment and that this affects the mortality statistics of this disease. A great many more die of phthisis and other tuberculous diseases than are actually reported. People often falsify the death reports because of industrial insurance. Knowing tuberculosis to be a preventable disease, the state, county and community must provide the means for a man to fight the disease. An excuse is often made because of the large expense which would be incurred, but the loss due to illness and deaths of this disease is sufficient to carry on the entire state government expense. Dr. Pryor advocates state sanatariums and believes each state should follow New York State's example and establish such institutions. Every physician should use his influence on the officials toward this end.

Dr. **DeLancey Rochester** spoke in favor of the education of the masses and illustrated his remarks, showing the great difficulty recently experienced in Buffalo in having an antispitting ordinance passed by the aldermen. He advocated teaching the school children physiology and hygiene properly, but not from the antiquated and poor text-books now in use. Dr. Rochester thinks that a child is not born tuberculous. Buffalo and Erie County has an institution for the treatment of phthisis pulmonalis, and thought the Erie County Hospital should receive the support which it deserves.

Dr. **Benjamin G. Long**, president of the Buffalo Antituberculosis Society, advocated the formation of a national society. The society of which he is president, will make an exhibit at the Pan-American Exposition, showing the communicability, preventability and curability of the disease. He also invited all members of the Academy to join the local antituberculosis society.

Dr. **Herbert U. Williams** thought that the society, as stated above, should stimulate original research in the study of certain problems in tuberculosis. It seems that we have not as yet the whole life history of the tubercle bacillus. The bacillus may exist outside of the body different from those seen in the sputum. The bacillus may resemble somewhat the ray fungus. Bacilli have also been demonstrated in milk and butter, which like the tubercle bacilli, when stained are not decolorised by acid solutions, so that the diagnosis of the tubercle by its characteristic staining properties is not so certain as formerly supposed to be.

Dr. **Knopf** closed the discussion by saying that climate is not a cure-all, but only an adjuvant in the treatment of phthisis pulmonalis. The education of the masses will be of great service in the future decrease of the mortality of this disease, and for this reason he strongly urges the antituberculosis societies to have lay members.

Section on Ophthalmology, Otology, Rhinology and Laryngology, May 20, 1901.

Reported by GEORGE F. COTT, M. D., Secretary.

The tenth meeting of this section was held May 20, Dr. **F. W. Hinkel** in the chair.

Dr. **Elmer G. Starr** exhibited an instrument for measuring the balance of ocular muscles. Discussion by Drs. Blaauw and Starr.

Dr. **John E. Sheppard**, of Brooklyn, N.Y., Professor of otology in Long Island Medical College, then read a paper on

SINUS PLEBITIS AND THROMBOSIS.

He said that after a brief historical sketch of the early recognition of sinus disease, a few statistics were presented as to the relative frequency of death from ear disease as compared with the total of deaths, the total of ear diseases, and the total of suppurative ear diseases; as to the relative frequency of the various otitic brain diseases contrasted with one another; and as to the relative frequency of location of otitic thrombosis.

The etiology and pathology were next considered, after which, under symptomatology, were considered seriatim the following: headache, vomiting and constipation, consciousness retained or impaired, restlessness, hyperesthesia, paralyses, vertigo, choked disc and optic neuritis; then the symptoms due to venous obstruction of the sinus, together with those brought about by inflammation and over distension of the superficial veins, viz.: Griesinger's symptom, Gerhardt's symptom, edema of various regions, the hard, tender, cord-like feeling along the anterior margin of the sterno-mastoid muscle, and those due to pressure on the cranial nerves, whose avenue of exit is the jugular foramen, together with those which of all the symptoms are the most characteristic, viz.: the pyemic fever, the chills and rapidly oscillating temperature, and profuse sweating.

Whiting's course of the disease was adopted as being classical. The addition of certain pyemic manifestations to any of the following ear conditions should be considered as diagnostically suggestive: (1) A more or less profuse chronic otorrhea, which has rather suddenly lessened or ceased; (2) a chronic middle-ear suppuration, with such scanty secretion as perhaps to be unknown even to the patient, and discoverable only by ocular inspection under illumination of the external canal and tympanum; (3) an acute middle-ear suppuration attended with more or less unmistakable evidence of mastoid involvement; (4) an acute middle-ear suppuration in which the discharge has gradually lessened and finally ceased from two weeks to two or three months previously, attended with, and followed by, more or less obscure, and slowly lessening symptoms of mastoiditis.

When, therefore, to any of these conditions be added, rigors with rapidly fluctuating temperature, sweating, localised headache, vomiting, especially if associated with any of the evidences of venous obstruction, or the tender, cord-like feeling in the jugular region, and a rapidly developing asthenia, the diagnosis is unmistakable, particularly if there be added thereto metastases. Considerable attention was given to the differential diagnosis, and, under treatment, immediate operation was urged the moment the disease was recognised, the writer also stating that in his opinion it would be a good general rule, to which he admitted a considerable proportion of exceptions, to ligate the internal jugular vein as a measure preliminary to disturbing an infected thrombus in the sinus.

Dr. A. A. Hubbell.—I have had no experience in operations of this condition. I have come across several cases which seemed to be sinus thrombosis. I have seen two cases suspicious of sinus thrombosis and both recovered. We may get complete organisation of clot and get recovery. All patients do not die, even with symptoms of pyemia. In regard to making a diagnosis in cerebellar abscess, I don't understand what point the doctor has taken in making a diagnosis.

Dr. E. E. **Blaauw.**—I think we ought to be congratulated for having had the opportunity to listen to Dr. Sheppard's paper. I think the honor of first operating in this condition belongs to Zaufal. He spoke about it in 1888. Operation in meningitis and thrombosis is good. Immense difference whether pneumococci or staphylococci are cause of infection. With the help of the bacteriologist, the burden is lightened. The doctor says there cannot always be made a diagnosis of typhoid fever. There are cases of thrombosis with large spleen, typhoid stools and erythematous patches. We do not blame the general practitioner for making a mistake. The author claims facial vein causes edema of eyelid. That is a mistake. If cavernous vein is affected we get swelling of ophthalmic vein instead.

Dr. **Sheppard**, in closing, said, a few seemingly authentic cases of sinus diseases have recovered without operation, but it must be remembered that in such cases the diagnosis cannot be confirmed, and at any rate they are so exceptional as to do no more than to prove the rule that the prognosis in unoperated cases is bad. I think perhaps I did not specially emphasise any point in the diagnosis of cerebellar abscess, since that was only casually spoken of as a complicating condition. In this case, and I think that is often true, the possibility of excluding other intracranial conditions aided us as much, perhaps more than, as direct reasoning.

Then followed election of officers: Dr. Elmer G. Starr was elected chairman and Dr. Arthur G. Bennett, secretary.

REMARKS BY RETIRING CHAIRMAN HINKEL.

In yielding the honors and duties of the chairmanship of this section to my successor, I take pleasure in the thought that in two years of its existence, the section has sanctioned the judgment of the men whose interest and enthusiasm secured its establishment as a separate branch of our Academy of Medicine. It was thought by some that members and interest were lacking to secure the support needful for a department of the Academy devoted exclusively to the consideration of matters pertaining to the eye, ear, nose and throat. The record of the attendance of our meetings of the past year and the character of the transactions, are a sufficient answer to any questions of the advantage to the Academy of the establishment of this section. In members and attendance our meetings have averaged about 30, with a maximum attendance of 87. We have had men of international reputation to address us upon topics pertaining to each of the fields that our section covers, and while technical papers of high quality have not been wanting we have been able also to interest the general profession in our transactions, and one of the best papers of the year was read by a Fellow in general medicine. I believe the section has now passed from the stage of experiment to assured success if we but continue our interest and give the efforts of our officers loyal support. To them it remains to insure the continuance of interest by compelling it by the merit of the themes and speakers presented for our consideration.

Permit me again to urge upon the Fellows the advisability of increasing the clinical features of our transactions. An interesting or obscure case, or one showing the results of operation, or new apparatus or instruments; indeed anything pertaining to the immediate application of the theory of medicine will make our meetings more vital, instructive and profitable, than abstract articles or verbal reports of cases. Let each provide from clinic or private practice, such cases for exhibition as he is able, and I am sure there will be no question of interest in our meetings or of a full attendance. A few of the Fellows have responded well to my request for clinical material and I beg now to thank them for their valuable addition to the work of the year.

By a misunderstanding, the responsibility for which falls upon the chairman, our meetings have been held upon the third Monday of each month. Our by-laws provide that we shall meet upon the second Monday. I suggest that the section do not make the action this year a precedent, but return to the original time. A great advantage to be obtained by holding the meetings on the second Monday of the month, is that it will enable us to hear and adopt the minutes of the previous meeting before they have gone to press. The manuscript for the BUFFALO MEDICAL JOURNAL, in which our transactions appear, must be in the hands of the printer by the 15th of the month, and it happens under our present arrangement that the secretary must have the minutes of the previous meeting in type before they are formally adopted by the section at its succeeding meeting. You will join, I am sure, with the chair in an appreciation of the excellent and full reports of our meetings and discussions that have been made this year by our secretary. In conclusion, I beg to thank the Fellows for the interest they have shown in the work of the section during the year and for the hearty coöperation they have given the officers in their endeavor to make the year's work interesting and worthy.

Before adjournment, Dr. E. E. **Blaauw** moved a vote of thanks to the essayist, Dr. Sheppard, for his excellent paper, which was unanimously given.

Adjourned.

Section on Pathology, May 21, 1901.

Reported by JACOB S. OTTO, M. D., Secretary pro tem.

The regular monthly meeting of the Section in Pathology of the Buffalo Academy of Medicine was held in the Academy rooms on the evening of May 21, 1901. Dr. **Eugene A. Smith** presiding.

In the absence of the secretary, Dr. J. S. Otto was selected pro tem.

The first essayist of the evening was Dr. **Herbert U. Williams**, professor of pathology, medical department, University of Buffalo, who read a paper on

THE FREQUENCY OF TRICHINOSIS IN MAN IN THE UNITED STATES; ALSO HISTOLOGY OF THE OLD LESIONS.

The microscopic examinations of pork made by the Bureau of Animal Industry have shown that about 2 per cent. of hogs in this country contain trichinæ. Records of autopsies and dissecting rooms in Germany have shown from 0.1 to 3.0 per cent. of cases of trichinosis in man. Osler's records give six cases of trichinosis in 1,000 autopsies. At the Montreal General Hospital trichinosis was found twice in 919 autopsies. It is not certain how far systemic microscopic examinations were carried out in any of the preceding. The writer began investigation seven years ago, and has investigated samples of muscle from 505 unselected autopsies and discovered 27 cases of trichinosis, *i. e.*, 5.34 per cent. The subjects all died of other causes than trichinosis. The trichniæ were invariably encapsulated and often calcified. The infections were of all possible degrees of severity. In some instances the diaphragm was riddled with the parasites, while on one occasion only one, and on another only two trachinæ could be found. The ages of the subjects varied from 19 to 78. The places of birth of the subjects varied as follows:

	Positive.	Negative.	Total.	Per cent. of + cases in each nationality.
United States, white	6	201	207	2.89
" " negro	5	65	70	7.14
British and Irish	5	57	62	8.06
Canadian	2	10	12	16.66
German	6	43	49	12.24
Italian	2	10	12	16.66
Other nationalities	0	27	27	00.00
Unknown	1	65	66	1.51
	27	478	505	

Positive cases were encountered from places as far apart as Buffalo, Baltimore and Denver. An unusually large proportion of cases occurred among insane persons. The histories of the patients seldom made reference to an attack of disease that could have been trichinosis.

Examination of sections of the muscles did not show any collection of eosinophiles or mast-cells about the parasites. Plasma-cells were sometimes found around and within the trichina capsules. Weigert's stain for elastic tissue showed an increase of elastic fibers about the capsules in some cases.

DISCUSSION.

Dr. Matthew D. Mann commended Dr. Williams on the good work done and related his experience with trichinosis while a student in the medical college. One case, a man who had eaten raw meat, came to autopsy and many trichniæ were found. Other persons who lived in the locality had the disease and eight cases were diagnosticated. He felt that Dr. Williams's paper ought to arouse painstaking diagnosis.

Dr. Albert J. Colton recalled five cases in the same family which were diagnosticated rheumatism and afterward found to be trichinosis.

Dr. Irving Lyon said that in view of the relation of eosinophilia to trichinosis, it was not surprising that trichniæ had been found in 5 per cent. of cases. He had observed the first case of eosinophilia —that of Dr. Brown at Baltimore, which had 68 per cent. and stated that five cases were diagnosticated thereafter by examination of the blood. Eosinophilia occurs early and persists in some cases four, five or six months. Most frank cases resemble typhoid—some, especially chronic cases, resemble chronic rheumatism. He recalled a case seen recently, that of a Jewish boy, who had eaten raw meat, that had 13 per cent. eosinophiles.

Dr. **DeLancey Rochester** called attention to one lesson of importance, that of the routine examination of the blood in every acute case of any disease.

Dr. **Herbert U. Williams.**—Acute cases as a class have not been thoroughly investigated. Is now investigating stomach contents with that in view. Pork is the only meat that is known to be infected. The mouse, fox, squirrel and hedgehog have been found to be infected, but no common food animal other than the pig. Other foods have been examined without result. The rat is the natural host and sausage is the commonest source of infection. The only remedy is the prevention of trichinosis in the hog. The tendon is the most common place of the lesion, but it has been found, though very seldom, in the heart and spleen. It has been demonstrated that migration by way of the peritoneal cavity is not the only way. The young worm may pass through the lymphatics and thoracic duct to the heart and then be carried to any part of the body. Trichinæ have been found in the capillaries.

The second paper of the evening was presented by Dr. **Abram T. Kerr**, professor of anatomy, Cornell University, the subject being

THE ANATOMY OF THE BRACHIAL PLEXUS.

Dr. Kerr prefaced his paper by stating that many changes were taking place in the subject of gross anatomy, and called particular attention to the phase of embryology by the study of which the questions of the anatomy of the brachial plexus would undoubtedly be solved, for the origin of the plexus can be found by using stains and the microscope. There are a large number of anomalies, and the question arises whether the anomalies are not normal.

It is essential in order to obtain sufficient and accurate statistics that a careful study be made of every subject, and in this connection the speaker urged the training of students in the keeping of complete records of dissection. This plan is carried out by the Anatomical Society of Great Britain and Ireland and the Johns Hopkins University.

It is possible to separate the brachial plexus into types, and in 200 records that the essayist has, the following six types appear:

A—Outer cord from the 4th, 5th, 6th and 7th spinal nerves; posterior cord from the 4th, 5th, 6th, 7th, and 8th spinal nerves; inner cord from the 8th, and 9th spinal nerves, 2½ per cent.

B—Outer cord, 4th and 7th nerves; posterior cord, 4th and 9th nerves; inner cord, 8th and 9th nerves, 43.7 per cent.

C—Outer cord from the 4th and 7th nerves; posterior cord, 4th and 9th nerves; inner cord, 7th, 8th and 9th nerves, 6.2 per cent.

D.—Outer cord, 5th and 7th nerves; posterior cord, 5th and 9th nerves; inner cord, 8th and 9th nerves, 32.1 per cent.

E.—Outer cord, 4th and 5th nerves; posterior cord, 5th and 9th nerves; inner cord, 8th and 9th nerves, 10.5 per cent.

F.—Variable, 5 per cent.

It will be noticed that types B and D together make up 75.8 per cent.

DISCUSSION.

Dr. **Eugene A. Smith** inquired whether any investigations had been made of the anatomy of the external plantar nerve, particularly in relation to Morton's neuralgia.

Dr. **Kerr** stated that he could give no information on this point.

Adjourned, 11 p.m. Present, 28.

Section on Obstetrics and Gynecology, May 28, 1901.

Reported by WILLIAM G. RING, M. D., Secretary.

The regular monthly meeting was held on Tuesday evening, May 28, 1901, at 8.30 p.m. Dr. **Henry D. Ingraham**, chairman, pro tem.

The minutes of the previous meeting were read and approved.

Dr. Frank W. McGuire nominated Thomas F. Dwyer for chairman.

Dr. A. L. Benedict moved that the secretary cast a ballot electing Dr. Dwyer. Carried. The secretary so cast the ballot.

Dr. Dwyer made a graceful speech of acceptance.

Dr. Marcel Hartwig nominated Dr. Ludwig Schroeter for secretary. Dr. Charles Jewett nominated Dr. Harry Rooth. Both declined.

Dr. F. W. McGuire moved that a ballot be cast electing Dr. W. H. Mansperger. Carried. The secretary so cast the ballot. Dr. Mansperger accepted in a brief speech.

Dr. A. L. **Benedict** read a paper on the Sanitation, medicine and surgery of the aborigines, with a medical view of their tortures.

DISCUSSION.

Dr. J. W. **Grosvenor**—I have been greatly interested in this subject. Dr. Benedict has mentioned the objection to trephining. I would like to ask if instruments for performing this operation have been found in the vicinity of the skulls operated on.

Dr. E. E. **Blaauw** raised a question as to the use of salt among the Indians.

Dr. A. G. **Bennett** asked if there is any truth that syphilis is an American disease in origin.

Dr. **Ludwig Schroeter** stated that whole bags of buttons from skulls could be found, showing that trephining was common.

Dr. **Benedict**, in closing, said methods of drilling were two: by conical instruments and round stalks with sand. We cannot say that syphilis was widespread. There is little tradition of venereal disease. The Indians abhorred salt; they got sufficient from air and meat animals.

Dr. M. D. **Mann** read a paper on Removal of the female bladder for malignant disease.

DISCUSSION.

Dr. **Marcel Hartwig.**—Did I understand that Dr. Gaylord found in the urine evidence of the new organism of cancer?

Dr. Grosvenor asked for statistics of recovery.

Dr. **Ingraham.**—I saw Pawlik's case eleven years ago. The operation of closure of the vagina did not close.

Dr. **Mann.**—I did not take the percentage of recoveries. I think they are 50 per cent. I have had no trouble in getting perfect closure of vagina.

Dr. **Gaylord** said the organism that he found was the germ of cancer in abundance in the urine.

Meeting adjourned at 10.45 p.m. Members present, 21.

Abstracts.

INTESTINAL DISEASES OF CHILDREN.

Dentition, in my opinion (George Howard Thompson, M.D., Prof. Mat. Med., etc., St. Louis College of P. and S.), is only incidental to the gastro-intestinal disturbances known under the general name of cholera infantum. Cholera infantum coincidental with teething is apt to be regarded as a result of a physiological process by the thoughtless observer. We must differentiate between a coincidence and a cause. Cholera infantum may take place at any season of the year; so may the process of teething. These two conditions frequently take place simultaneously. Cholera infantum, however, is far more likely to occur in the summer—in the central and southern sections of the United States, in August and September—than in any other season of the year. Indiscretions in diet are the exciting causes. When teething is coincidental we can more readily understand the influence of indiscretion than at a later period. The mere fact of dentition can be responsible only for certain reflex nervous disturbances; but the cause of dentition is the necessity for a change in the child's diet. The child must be supplied with food different from the mother's milk, otherwise, why the advent of teeth? This necessity is recognised intuitively by the mother, who not knowing how to meet the indication physiologically, is only too apt to kill the child with mistaken kindness. The child gets bread to bite, which its gastro-intestinal apparatus is not ready to dispose of properly. It ferments and sets up a gastrointestinal irritation, nausea, vomiting and purging results, and, finally, the doctor is called.

This summer, I have had a large number of cases of cholera infantum, subacute gastrointestinal indigestion and marasmus. Probably my best results were derived from the following line of treatment: Baby was given podophyllin one-fortieth of a grain, or calomel, one-tenth of a grain, until the passages indicated the presence of bile. Then an intestinal antiseptic sedative and astringent consisting of:

℞	Bismuth subcarbonatis	dr. i.
	Glyco-thymoline (Kress)	fl. oz. ss.
	Mist. cretæ	q. s. ad. fl. oz. iij.

M. Sig. Shake the bottle and take a teaspoonful every three hours.

It is always a good idea to give the baby a enema of a pint of warm water, in which is an ounce of glyco-thymoline at the commencement of treatment, in order that the colon may be relieved as rapidly as possible of its fermenting and decomposing contents, and the lining meet the antiseptic and healing application as soon as possible. Daily enemata of the above solution are frequently advisable.

This remedy is antiseptic; it is nontoxic in the dose given; it is nonirritant; it is healing. It is about the only antiseptic that can be safely given to children.

AUTOMATIC SAFETY-VALVE STOPPER FOR PREVENTING THE BURSTING OF PEROXIDE OF HYDROGEN BOTTLES.

THE great trouble with peroxide preparations (*National Druggist*, April,) is that if the containers are tightly corked, the oxygen which separates and is set free, accumulates slowly but constantly as time passes, until the bottles can no longer stand the pressure and burst, or the corks are driven out.

Containers of the hydrogen peroxide, U. S. P., which is a comparatively weak solution of H_2O_2, yielding but 10 volumes of oxygen, may be closed with a wooden stopper, which by the porous nature of the material, permits the escape of the gas almost as soon as it is set free, thus avoiding explosion and rupture of the bottles or the driving out of the corks.

While these wooden stoppers answer very well for solutions of H_2O_2 responding to 10 volumes of oxygen or less, with stronger solutions, such, for instance, as Marchand's peroxide of hydrogen medicinal (15 volumes), or his hydrozone (30 volumes of oxygen) they are quickly attacked by the solutions, as are also the ordinary corks, and within four months are completely oxidised, and rendered so soft that they cut like pot cheese.

In order to prevent these difficulties and especially to obviate the bursting of the bottles containing hydrozone, Mr. Marchand, the manufacturer of that article and other well-known brands of peroxide of hydrogen, has devised an ingenious stopper which he calls the automatic safety valve rubber cock.

The material of the stopper is vulcanised rubber. The beveled end is punctured through in such a manner that when the pressure in the bottle rises above 5 to 8 pounds to the square inch, the excess of free oxygen finds free egress and thus relieves the tension.

This device is first inserted, and a plug of porous wood is then driven in, thus stiffening the rubber and completing the operation of corking.

The capping consists of vegetable parchment covered with paraffined muslin, no wiring being used or needed, and there is no popping when corks are removed.

Retail druggists who have for so many years been the chief sufferers and losers from the bursting of the peroxide containers, and the deterioration of the substance otherwise from the causes indicated above, will welcome this device as a happy solution of what has to them been a very serious problem in the past, since it will enable them to supply their trade with the higher solutions of hydrogen peroxide.

The medical profession is being thoroughly advised of Mr. Marchand's new method of closing his bottles of peroxide of hydrogen medicinal and hydrozone, and will be certain to avail themselves of the advantages thus guaranteed them.

CLINICAL EXPERIENCE WITH ADRENALIN.

EMIL MAYER, of New York, (*Phil. Med. Jour.*,) says that Dr. Jokichi Takamine undertook the task of isolating the active principle of the suprarenal gland and obtained a substance in stable and pure crystalline form, which raises the blood pressure, and which he named adrenalin.

The author has used solutions of adrenalin chloride, 1 to 1,000, 1 to 5,000 and 1 to 10,000; his cases were all rhinological. Blanching of tissues followed the application of the strongest of these solutions in a few seconds, and was very thorough. In no instance was there any constitutional disturbance. He has employed no suprarenal extract since, for any purpose whatever.

Thirty-five cases are reported, showing that the usual effect of the aqueous extract of the suprarenal gland was obtained. A few operative cases bled freely, but in every instance, the hemorrhage was promptly checked by a second application of adrenalin. The adrenalin was used not only as a hemostatic, but for the relief of nasal congestion, as a diagnostic aid, and for the continuous treatment of acute inflammatory affections of the accessory sinuses.

The author arrives at the following conclusions: (1) adrenalin solutions supply every indication for which the aqueous extract has been used; (2) they are sterile; (3) they keep indefinitely (4) solutions, 1 to 1,000 are strong enough for operative work, and 1 to 5,000 and 1 to 10,000 for local medication; (5) they may be used with safety.

Progress in Medical Science.

THERAPEUTIC NOTES.

EDITED BY NELSON W. WILSON, M. D., Buffalo, N. Y.

PEL'S POWDER FOR GASTRIC ACIDITY.

PROFESSOR PEL, of Amsterdam, after a great deal of experience, has found that the following powder is a most excellent remedy for gastric acidity:

℞	Bicarbonate of soda	10.00	ʒiiss.
	Calcined magnesia	8.00	ʒii.
	Bromid of soda	10.00	ʒiiss.
	Carbonate of bismuth	5.00	gr. lxxv.
	Sugar of milk	10.00	ʒ ijss.
	Oil of fennel	.26	gtt. iv.

Mix. Dose, from half to a whole teaspoonful; to be taken an hour after eating. An extra dose in case of pain.

FOR HEMORRHOIDS.

The *New York Medical Journal*, which is famous for the excellence of its therapeutic notes, gives the following for hemorrhoids:

℞	Fluid extract of æsculus hippocastanum	32.00	℥i.
	Chloroform	4.00	ʒi.

Mix. Morning and evening, at meal times, 10 to 15 drops are to be taken in a glass of wine or sweetened water.

℞	Fluid extract æsculus hippocastanum	24.00	ʒii.
	Fluid extract of hamamelis	10.00	ʒiiss.
	Oil of peppermint	.13	gtt. ii.

Mix. Fifteen drops of this mixture at meal times, morning and evening, in wine or sweetened water.

TO WARD OFF URETHRAL CHILLS.

This annoying result of internal urethrotomy or the passing of sounds may be warded off by using Weir's prescription, which follows:

℞	Sulphate of morphine	.006	gr. $\frac{1}{10}$
	Tincture of aconite	.13	m. ii.
	Oil of wintergreen	1.00	m. xv.

Mix. For one dose.

THE ADMINISTRATION OF DORMIOL.

Merck's Archives gives the following methods for the administration of dormiol, the new hypnotic compound of chloral and amylene hydrate:

℞	Dormiol, 10 per cent. solution	105.00	℥iiiss.
	Raspberry syrup sufficient to make	120.00	℥iv.

Mix. Dose, one or two tablespoonfuls at bedtime.

℞	Dormiol, 10 per cent. solution	90.00	℥iii.
	Extract of licorice	4.00	ʒi.
	Syrup sufficient to make	120.00	℥iv.

Mix. Shake label. Dose, a tablespoonful at bedtime.

FOR AMENORRHEA.

THE *Jour. de Med. de Bordeaux* says Huchard's treatment for amenorrhea is as follows: He directs that the lumbar region be rubbed on retiring with this mixture:

℞ Chloroform	10.00	ʒ ii. ss.
Ether	20.00	ʒ v.
Spirits of camphor	90.00	℥ iii.

Supplement this by hot mustard foot baths, mustard to the inner aspects of the thighs and vaginal injections of water from 105° to 120° F. As a tonic he orders:

℞ Iron and potassium tritrate	6.00	ʒiss.
Socotrine aloes	1.00	gr. xv.
Extract of absinth	2.00	gr. xxx.
Extract of artemisia	2.00	gr. xxx.
Oil of anise	.10	gtt. iii.

Mix and make into fifty (50) pills.

Dose—Two after each meal.

AN INTESTINAL ANTISEPTIC.

A VERY good intestinal antiseptic is this which is credited by the *Med. News* to the *Jour. de Med. de Bordeaux*:

℞ Betanapthol	3.00	gr. xlv.
Chloroform	.03	gtt. xv.
Castor oil	90.00	℥ iii.
Spirit of peppermint	.02	gtt. v.

Mix. Adult Dose: A tablespoonful in port wine, beer or sweetened black coffee. Child's dose: A teaspoonful.

FOR WHOOPING COUGH.

THE *Journal of the American Medical Association* says that Dr. R. A. Lancaster has had great success in treating whooping cough with this mixture:

℞ Tincture belladonna	16.00–24.00	ʒiv.–vi.
Whiskey	30.00	℥i.
Phenacetine	10.00	ʒiiss.
Fluid extract chestnut leaves	180.00	℥vi.

Mix. Shake. Label.

Dose—From ten (10) drops for a child one year old to a teaspoonful for a 10-year old child every two to six hours.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

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TWO MEETINGS AT ST. PAUL.

IN JUNE, 1882, at the meeting of the American Medical Association at St. Paul, a tragedy was enacted which shocked the medical profession of the country so grievously that it has not yet recovered from the results thereof. Briefly stated, the facts are these: The Medical Society of the State of New York had then lately modified the code of medical ethics, to make it conform to the statutory laws from which the society derived its authority. The enemies of this reform have unjustly, if not maliciously, charged that its object was to permit consultations with homeopaths and other unrecognised sects in medicine. Nothing was further from the truth. The sole and entire object of the modification of the code was to remove antagonism between the by-laws of the society and the statutes of the state. This enabled the society to obtain from the legislature what is concededly one of the best practice acts in operation in the United States.

The society elected thirty-five of its most representative men as delegates to the St. Paul meeting in 1882. Dr. Cornelius R. Agnew, one of the most amiable as well as learned physicians, was chairman of the delegation, and when he arose to state the facts in the case to the association, his mouth was ruthlessly shut by the action of that body, which declined to hear one word in extenuation or explanation. Even the commonest criminal is granted the privilege of defending himself at the bar of justice. The treatment of Dr. Agnew and his colleagues was cruel, to say the least, and we have never yet heard or read any successful attempt to defend it.

Nineteen years afterward, that is to say in June, 1901, the American Medical Association met again at St. Paul, but in a different atmosphere and with a different environment. The president, Dr. Charles A. L. Reed, of Cincinnati, is a man of such liberal training and of such broad views, that it was inevitable that something should be done under his administration to right the great wrong committed in 1882, and to correct the great evil which resulted therefrom. That several other states had violated the so-called code, which some of the old-time leaders of the association pretend to love so dearly, without having been disciplined for their action as had New York, is a well-known fact; but it remained for Dr. Reed to show up this inconsistency in his annual address, in a fashion that must have made some of the men referred to experience a qualm of shame for their inconsistency.

Dr. Reed's address is a masterful state paper, which should be read by every member of the association and carefully studied, especially by the younger members. It deals with every phase of the association's work from its inception, and records its successes and failures with a fidelity to truth that no previous president has had the courage to delineate. Many of its recommendations relating to scientific investigation and the advancement of professional interests are deserving of the most patient thought by scientific men.

In accomplishing the reorganisation of the association, however, Dr. Reed has done the American medical profession an act of kindness that will outlast the work of every one of his predecessors. In establishing the house of delegates to take charge of the legislative work, in practically abolishing the offensive features of the code, and in proclaiming a unity of sentiment in the profession, he has lifted the association up to a higher plane than it yet has ever occupied. To have accomplished so much in a single year of administrative life stamps him with a most honorable fame, and entitles him to the gratitude of every American physician.

THE following excerpts from President Reed's presidential address at Saint Paul, will repay careful reading by every friend of medical progress:

At the same time, however, it became apparent that the organisation did not possess the necessary inherent strength to accomplish its avowed object to regulate the practice of medicine. As time passed schismatic medicine grew apace, its colleges mutiplied, its practitioners appeared all over the country exemplifying that law that always makes the blood of the martyrs the seed of the church. Quackery of the most flagrant character was found everywhere, and society was unprotected from its ravages, while the inability of a voluntary unchartered organisation to enact and to execute plenary laws was reduced to a demonstration. The medical profession, as an organised body, discovered that its relation to the commonwealth was, as the result of its own proscriptive policy, scarcely more intimate or more influential than at the beginning of the thirty years' hopeless experiment.

⁂

The profession in each state, however, recognising its own local conditions, proceeded in its own way to attend to its own business. The very earliest attempt to secure state legislation revealed the fact that the so-called irregular practitioners, under the stimulus of ostracism and the fostering care of public sympathy thereby induced, had become so numerous and influential that in the majority of states nothing could be done without their coöperation. It was no longer a theory, but a condition with which the real reformers were confronted —and they met it. California, in 1876, through its regular medical society, took the initiative. After conferences with the representatives of the sectarian societies, and after securing their coöperation, a law was procured, creating a licensing board composed of representatives of both the regular and sectarian schools of practice. Illinois, confronted by precisely the same condition, took precisely the same course. Alabama, always progressive, but the happy possessor of other conditions, was able to place the regulation of medical practice for the time being under the control of its incomparable state medical association. Colorado created a mixed board. New York, confronted by conditions even more complicated than those in other states, took up the same task. The profession of that state, acting through its organised body, containing among its members many of the most honored and illustrious names in American medicine, found it doubly necessary to enter into treaty with the denominational physicians. It realised, however, that the rules of conduct to which it had always conformed contained among other provisions one which made it unlawful to " . . examine or sign diplomas or certificates of proficiency for, or otherwise be especially concerned with the graduation of persons whom they have good reason to believe intend to support and practice any exclusive and irregular system of medicine."

As the thing expressly interdicted by this rule was the very thing which it proposed to do, and which had been done in other states, and which it was very necessary to do in New York, the medical society of that state amended the rules of conduct so that it or its members might, at discretion, enter into professional relations with any or all persons whom the law of the state at that time recognised to be practitioners of medicine. When this action was brought to the attention of this national body it resulted, not as might have been expected, in the amendment or the abrogation of the rule which had grown obsolete in the march of events, but in its tacit reaffirmation and in the opprobrious excommunication, for the time being of the entire profession of the great Empire state. This action, viewed impartially after the lapse of nearly twenty years, becomes the more extraordinary when it is observed that similar action was never taken with regard to Massachusetts or Rhode Island or Mississippi, the societies of neither of which had ever adopted the prescribed rules of conduct; nor with regard to California or Illinois or Colorado, each of which had, by overt act, if not by open declaration, so far as this rule is concerned, taken an equally non-conformist position. It is not surprising that, with such an example before the state societies, the experiment in consistency has not been repeated. But the movement of effective regulative legislation, once inaugurated, happily spreads with great rapidity. Mixed boards of licensure are now to be found in the majority of the states of the Union, and in the majority of such boards are to be found members of the American Medical Association engaged in issuing licenses to practitioners of exclusive dogmas, and sitting in consultation with sectarian physicians, not over a dose of medicine, but over the more vastly vital question of the qualifications of those who are to care for the sick of our Republic.

⁂

Today there are forty-eight state or territorial licensing boards, the most of them being composed of representatives of both the regular and the sectarian schools of practice. The laws of the different states are of varying efficiency, the one procured by the Medical Society of the State of New York, at the price of yet maintained excommunication from this body, standing today as the model of excellence for the entire country.

⁂

We thus see that the proscriptive rule which, during the more than twenty-five years of its dominance, propagated the very evils it was intended to correct, is rapidly expiring by limitation in the face of new conditions that have been induced, in spite of it, by beneficent and catholic legislation. In the State of New York alone the annual registration of sectarian physicians has diminished nearly 90 per cent. under the operation of its present laws.

⁂

The committee on reorganisation, under the restrictions of the resolution creating it, has, very properly, left undisturbed the existing rules of conduct. These, if construed to have a fundamental importance, and if vigorously enforced as they now stand, would disintegrate the association in a single day. This reason, and others already given, confirm me in the conviction that such rules should be either amended or abrogated, or, if reaffirmed, it should be by general resolution endorsing their underlying principles but disclaiming the present applicability of their details.

A CENSUS of the consumptives in this state is to be begun very soon by Dr. Daniel Lewis, state commissioner of health. It will be the first census of the kind ever undertaken in this state. The census is for the purpose of ascertaining the number of consumptives in the state as far as possible, and revealing other facts relating to the disease. It is expected that this enumeration will throw light on the question of what the state should do for the care of those within its borders who are afflicted with consumption, and who cannot afford to pay for treatment at the private sanitoriums.

About eighteen or twenty months after this census is completed another will be taken and the results of the two will form, it is thought, a good basis for comparison. The results of these statistical tables will reveal to the commissioner of health and to the public whether consumption is on the increase or not as well as other valuable facts.

THE JOURNAL has received the following communication, which explains itself:

CINCINNATI, June, 1901.

I am endeavoring to establish the facts which I believe from my own personal observation to be true (see *Lancet Clinic*, June 8, 1901,) of an inherited tendency or predisposition to appendicitis. If the readers of your journal will kindly look into the history (family) of their cases and report results to me, I will be under very many obligations.

W. H. DEWITT, M. D.,
61 Auburndale Place.

THE New York *Tribune* of May 28, 1901, says: Dr. Joseph Price, in a paper which he read before the Philadelphia County Medical Society, the other day said: "I attribute the enormous increase of appendicitis among women to golf, cricket, the bicycle and other outdoor sports, which at times subject them to prolonged physical exertion and inclement weather."

DEAR old Rip Van Winkle, says the *Post-Graduate*, is put completely in the shade by a recent article in the *Jour. N. Y. State Med. Assn.*, entitled, The Reason for the Existence of the New York State Medical Association. The author explains in seven columns why the association seceded from the state medical society. It was all because the majority of the state medical society for three years in succession, deliberately decided that its members might consult with any legally qualified practitioner. Without this decision there would have been no law creating a state board of medical examiners, as the

Post-Graduate has so often shown, but our friend, the author of this antediluvian history, seems to think it a very reasonable thing that a society should be excluded from the American medical association because it conforms to the law of the state, does not pretend to be wiser than the state authorities, and permits its members to consult with any one that the authorities have decided to be a legal practitioner.

PAN-AMERICAN NOTES.

THE Exposition Hospital, which has been fully described in the JOURNAL, has had plenty of business since the grounds were opened. Over 1,600 patients have been treated, which indicates a large attendance at the fair. Visitors who may be taken ill are assured of the best of medical service and nursing.

FOUR new nurses were appointed by Supt. Adella Walters for the month of June at the Pan-American Hospital. The appointees are Miss Florence Hamilton and Miss Louise Greenwood of the Buffalo General Hospital; Miss Laura M. Jarvis of the Arnot Ogden Memorial Hospital, Elmira, and Miss Eleanor M. Alexander of the Kingston General Hospital, Toronto. Four others will be appointed for the next month.

AN X-RAY machine has been installed in Medical Director Park's office.

AMONG the conveniences added to the hospital recently is a Fox-Piper invalid bed. It was contributed by Harry Piper, a former alderman of Toronto. It appears to be admirably adapted for lifting and changing the position of heavy patients and for easing the pain of those suffering from fracture, paralysis or other similar helpless conditions.

THE infant incubators are attracting a great deal of attention. It is interesting to note the processes of development that can be witnessed here. Many a prematurely born child which would otherwise be lost is nurtured up to a vitality that makes it capable of independent life. As soon as a child is received it is given a bath in mustard-water, then two drops of brandy are placed in its mouth. Its body is next rubbed with alcohol, and the child is placed in the incubator, which is kept at a temperature of 96 degrees Fahrenheit for four or five days. It is removed regularly day and night every hour and a half to be fed about fifteen grams of nourishment with a nasal spoon.

A FILIPINO girl baby was born on the Midway June 18, 1901. This little girl is the first Filipino child born in this country. That she is lusty is evidenced by the power of her lungs, and she will soon begin to hold receptions. Her mother, of course, is very proud of the American Filipino, and was much concerned over the proper naming of the infant. All the village felt that this infant was an uncommon child and that a specially fitting name should be bestowed.

DR. CONEY of the baby incubators was called to the Indian Congress at 3.30 o'clock a.m. June 20th. An Indian baby had been prematurely born. The mother is Princess Ikishupaw, an Apache. The baby weighs only two pounds, two ounces. It is one of the smallest babies ever born. Dr. Coney had it removed to the baby incubators, where it was placed in one and where it can be seen. The father is Chief Many Tales, also an Apache.

THE United States Hospital Corps' camp, near the Government Building, is paved with broken stone, and is an exceedingly interesting exhibit. Dr. Edward L. Munson, captain and assistant surgeon U. S. Army, is in command and there are 100 men under him. The camp consists of 22 tents. The hospital wards are composed of twelve "A" tents, set up in the form of a Geneva cross. There is a tropical ward, a winter ward, a summer ward. If the rest of the United States Army was represented in proportion to the hospital corps there would be over 5,000 United States troops on the grounds. The Hospital Corps and equipment station at the exposition are such as is usually assigned to an army brigade which contains 5,380 men.

SOMEONE has estimated the cost of a visit to the exposition from New York. The figures are as follows:

Fare from New York to Buffalo and return	$9.00
Room for four nights	3.00
Meals	4.10
Admission to exposition	1.50
Admission to Midway shows	4.00
Guide book	.25
Carfare to exposition	.30
Seeing Buffalo	.30
Fare to Niagara Falls	.50
Niagara attractions	1.10
Incidentals	.95
Total	$25.00

PERSONAL.

DR J. D. GRIFFITH, of Kansas City, was elected president of the Medical Association of Missouri at the annual meeting held at Jefferson City, May 21-23, 1901. This election caused universal satisfaction as Dr. Griffith is one of the most capable men in his profession in the State of Missouri, and under his administration a successful medical year is predicted.

DR. FRANK L. CHRISTIAN, formerly a house physician at Bellevue Hospital, New York, and more lately medical officer of the Eastern District Reformatory, has been appointed medical superintendent of the Elmira Reformatory. The position carries a salary of $3,500 a year and a residence.

DR. FREDERICK H. MILLENER, of Buffalo, has removed from No. 5 North Pearl Street to No. 724 Main Street. Practice limited to diseases of the ear, nose and throat. Telephone, Tupper 777.

DR. W. F. BECK, U. of B., '93, of Vermillion, O., has removed to Buffalo. His office and residence are at 80 Lemon Street.

DR. HENRY L. ELSNER, of Syracuse, President of the Medical Society of the State of New York, attended the semiannual meeting of the Medical Society of the County of Erie, June 11, 1901, at which time he read a paper entitled, Malignant endocarditis. Dr. William C. Krauss entertained a group of physicians in Dr. Elsner's honor at luncheon at the Buffalo Club after the meeting adjourned.

DR. A. WALTER SUITER, of Herkimer, a former president of the Medical Society of the State of New York, attended the semiannual meeting of the Medical Society of the County of Erie, June 11, 1901. He spent a few days in Buffalo on his way home from St. Paul in the interests of the American Public Health Association, which will hold its annual meeting in Buffalo next September.

MR. THOMAS STODDART, of Buffalo, was elected president of the New York State Pharmaceutical Association at its annual meeting held in Buffalo, June 4-7, 1901. Commenting on the choice of Mr. Stoddart the Buffalo *Evening News* of June 7, most fittingly said:

> Buffalo is much gratified that the State Pharmaceutical Association should have chosen its honored citizen, Mr. Thomas Stoddart,

to be its presiding officer for the ensuing year. Because of the high standard of the individual membership of the State Association, the selection comes as an honor to Mr. Stoddart and yet the association, at the same time, honors itself in the choice. Both as a business man and as a citizen Mr. Stoddart is a representative of whom Buffalo feels justly proud and the pharmacists and the new president are alike to be congratulated on the outcome of the balloting.

Dr. Herbert M. Tolfree, of Buffalo, has been appointed to the medical corps of the navy and will be commissioned as assistant surgeon. Dr. Tolfree was a naval cadet and took up the study of medicine to enter the medical corps.

Dr. Edwin Ricketts, of Cincinnati, has removed his office from 415 to 408 Broadway. Hours: 10 to 11 a.m., 1 to 3 p.m., and by appointment. Office telephone, Main 118; residence, N. 391 R.

Dr. L. G. Waterman, of Centerville, N.Y., has removed to Buffalo. His office and residence are at 54 Indian Church Road. Hours: 8 to 10, and 6 to 8.

OBITUARY NOTES.

Dr. William H. Daly, of Pittsburg, committed suicide by shooting himself in the right temple at his residence, June 9, 1901, aged 59 years. Dr. Daly was one of the most distinguished laryngologists in the country and had been president of the American Laryngological Association, as well as of several other medical organisations. He served during the civil war as a medical cadet, and during the Spanish war as chief surgeon of volunteers attached to the staff of General Miles. Dr. Daly was a man of splendid physique and of cheerful demeanor; but it is thought by many that the loss of his wife, a year and a half ago, served to depress him. His death was a great shock to his many friends all over the country.

Dr. Maurice B. Perkins, of Schenectady, professor of chemistry at Union College and at Albany Medical College, died suddenly June 18, 1901, aged 65 years. Dr. Perkins served for many years as a member of the state board of health. He also took prominent part in the proceedings of the Medical Society of the State of New York for a number of years and thus became well known to the general profession of medicine. His loss will be deeply felt by the colleges in which he taught as well as by his multitude of friends throughout the country.

Dr. Charles A. St. John, U. of B., '98, was killed in the Province of North Camarines, P.I., May 22, 1901. Dr. St. John was attached to the 26th Infantry as a medical officer. He was reported last October as dead from typhoid fever, but this proved an error, and he afterward performed excellent service. He was on duty in the field with the troops when he lost his life.

Dr. Edward L. Groess, U. of B., '93, of Buffalo, died at his home, June 19, 1901, from paralysis of the heart. He was born in Buffalo on May 10, 1863, and was a son of John G. Groess, one of the pioneers of the city. The funeral was held from the family home, corner of West and Auburn avenues, at 2 o'clock on Saturday afternoon, June 22. Dr. Groess was unmarried, and is survived by his father, two brothers, George and John J., Jr., and a sister, Mrs. Louisa Talbot.

Dr. **Westervelt Banta**, U. of N., '88, of Buffalo, died at his home at Perry and Hayward Streets, June 17, 1901, of cancer of the stomach. Dr. Banta's father was one of the original shipyard-men of Buffalo. He is survived by a widow, a mother, Sarah M. Banta, and two brothers, Dr. Rollin L. Banta and William S. Banta. The funeral was held from his late home and from St. Bridget's Church, June 20.

SOCIETY MEETINGS.

Dr Henry L. Elsner, president of the Medical Society of the State of New York, has announced the appointment of the business committee for the ensuing year, consisting of Dr. Nathan Jacobson, chairman, 430 S. Salina Street, Syracuse; Dr. George Ryerson Fowler, 301 DeKalb Avenue, Brooklyn, and Dr. William C. Krauss, 371 Delaware Avenue, Buffalo. All letters and inquiries pertaining to papers and scientific communications for the semiannual meeting to be held in New York City, October 15 and 16, 1901, and the annual meeting to be held in Albany, January, 1902, should be addressed to the chairman.

The congress on tuberculosis, which is to be held in London, July 23-26, 1901, promises to be a pronounced success, alike as regards attendance and the importance of the contributions that will be made to medical science. Professor Koch, of Berlin, and Dr. Roux, of Paris, are among the delegates who are expected from foreign countries, and the possibility of devising means for the stamping out of tuberculosis will be discussed from the points of view, not only of the doctor, but also of the sanitarian, the municipal ruler and the statesman. For the convenience of physicians from this country who intend being present an excursion has been arranged at reduced rates. The steamer will leave New York on July 10th and sufficient time will be allowed the party to visit Paris and also to attend the meeting of the British Medical Association, which will be held at Cheltenham in the last week of July. An entertainment fund of over $15,000 has been raised in connection with the tuberculosis congress, among the subscribers being many well known members of the British nobility and gentry, the corporations of the principal cities, the Rothschilds and other representatives of financial interests of Europe, and a large number of commercial houses, including Parke, Davis & Co. and some other houses interested in therapeutics. The arrangements for the trip are in the hands of Gaze & Sons, 113 Broadway, New York.

THE Buffalo Academy of Medicine held meetings during the month of June, 1901, as follows:

Section on Surgery.—Tuesday evening, June 4th. Program: Recent development in the cancer problem, H. R. Gaylord; demonstration with stereopticon.

Annual Meeting.—Tuesday evening, June 11th. Program: Election of officers. Reports of officers. An address by the retiring president, Marcell Hartwig.

Section on Pathology.—Tuesday evening, June 18th. Program: A case of pseudo-leukemia apparently developing into true lymphatic leukemia, accompanied by leukemic lesions and pigmentations, culminating in streptococcus infection, Grover W. Wende; discussion by Charles G. Stockton, Herbert U. Williams, Albert E. Woehnert and Irving P. Lyon.

Quarterly Meeting.—Tuesday evening, June 25th. Program: Acute respiratory failure occurring during the first few days of life; not due to asphyxia or congenital heart disease, Irving M. Snow. Discussed by H. D. Ingraham and A. J. Colton.

THE American Congress of Tuberculosis held an interesting meeting in New York, May 15 and 16, 1901, under the presidency of the Hon. Clark Bell of that city. The officers elected were as follows: Honorary president, A. N. Bell, Brooklyn, N. Y.; president, Henry D. Holton, secretary state board of health, Brattleboro, Vt.; secretary and treasurer, Clark Bell, Esq., City of New York. Dr. John H. Pryor, of Buffalo, was elected one of the vice-presidents.

THE Röntgen Society of the United States will hold its second annual meeting at Buffalo in the University building, September 10 and 11, 1901, under the presidency of Dr. Heber Robarts, of St. Louis. The secretary is Dr. J. Rudis-Jicinsky, of Cedar Rapids, Iowa: Committee on arrangements, Edgar B. Stevens, chairman, 688 Seventh street, Buffalo; Roger Cook Adams, Secretary, Drawer 963, Buffalo; Dr. Elmer E. Starr, 523 Delaware Avenue, Buffalo; Dr. Renwick R. Ross, 100 High Street, Buffalo; Dr. James W. Putnam, 525 Delaware Avenue, Buffalo.

THE American Laryngological, Rhinological and Otological Society, eastern section, held its annual meeting June 21 and 22, 1901, at the Library Building, under the presidency of Dr. W. Scott Renner, of Buffalo. A number of prominent laryngologists were present from important cities east of the Alleganies and an interesting program was disposed of. On Friday Dr. Renner entertained the society at luncheon at the Saturn Club, together with about thirty Buffalo physicians, whom he invited to meet the members.

THE fourth district branch, New York State Medical Association, was held at Buffalo, May 31, 1901, under the presidency of Dr. William H. Thornton. The officers chosen for the ensuing year are: President, C. A. Wall, of Buffalo; vice-president, J. W. Morris, of Jamestown; secretary, Bernard Cohen, of Buffalo; treasurer, W. Irving Thornton, of Buffalo.

THE Medical Society of the County of Erie held its eightieth semiannual meeting at Buffalo, June 11, 1901, under the presidency of Dr. William C. Phelps. The meeting was an exceptionally well attended and interesting one. The scientific program included a paper by Dr. Henry L. Elsner, of Syracuse, president of the Medical Society of the State of New York, entitled, Malignant endocarditis; and one by Henry R. Hopkins, of Buffalo, entitled, The fan system of heating and ventilating and the air supply of certain Buffalo schools.

THE American Association of Obstetricians and Gynecologists will hold its fourteenth annual meeting at the Hotel Hollenden, Cleveland, O., Tuesday, Wednesday and Thursday, September 17, 18 and 19, 1901, under the presidency of Dr. William E. B. Davis, of Birmingham, Ala. The committee of arrangements is composed of Dr. M. Rosenwasser, 722 Woodland Avenue and Dr. William H. Humiston, 122 Euclid Avenue, Cleveland, either of whom may be addressed concerning rooms or other local information regarding the meeting.

THE American Public Health Association will hold its twenty-ninth annual meeting at Buffalo, Monday, Tuesday and Wednesday, and Thursday and Friday, September 16-20, 1901, under the presidency of Dr. Benjamin Lee, of Philadelphia. Dr. Henry R. Hopkins, 433 Franklin Street, Buffalo, is the chairman of the committee of arrangements, who may be addressed concerning any local information pertaining to the meeting.

THE American Gynecological Society held its twenty-sixth annual meeting at Chicago, May 30-June 1, 1901, under the presidency of Dr. Ely Van de Warker, of Syracuse. The meeting was an extremely interesting one and among many papers of interest one, entitled, Extirpation of the bladder in the female for cancer, by Matthew D. Mann, of Buffalo, deserves special mention. Dr. Mann reported two operations for this condition which we believe are the first made in this country. Dr. S. C. Gordon, of Portland, Maine, was elected president for the ensuing year.

THE Medical Association of Central New York will hold its thirty-fourth annual meeting at Buffalo, August 27 and 28, 1901, at the Library Building, under the presidency of Dr. Lucien Howe, 183 Delaware Avenue, Buffalo. Dr. Charles P. Van der Beek, of 16 Gibbs Street, Rochester, is the secretary.

COLLEGE AND HOSPITAL NOTES.

THE Albany Hospital has arranged a series of clinical days for the months of July and August, to which practitioners of medicine are invited. They will occur once a week and will consist of clinical lectures and demonstrations in general medicine, major and minor surgery, gynecology, pathology, clinical microscopy and the specialties. An entire day, Tuesday of each week, will be thus occupied and an effort will be made to present the most valuable of the recent advances in medicine with illustrative cases. The work will be thoroughly practical and helpful, and is especially designed for those who are desirous of keeping in touch with medical progress as shown in a large, modern, and well-equipped hospital.

The Albany Club extends to the non-resident physicians in attendance the courtesies of the club house. These privileges are made available through a card, which may be obtained from the secretary of the course. Physicians who contemplate attending the clinical days are requested to register with the secretary of the course, in order that they may receive on each successive Monday a definite and detailed program of the succeeding clinical day.

The provisional program may be at times modified, in order that rare or unusual cases may be presented. No charge whatever will be made for any of the clinics or lectures. Physicians who desire further information can obtain full details by addressing Dr. Edgar A. Vander Veer, Secretary of the Course, 28 Eagle Street, Albany, N.Y.

University of Buffalo—Medical Department—A Pan-American Bureau of Information for use of alumni exclusively has been established by the faculty and Alumni Association. Office, 24 High Street—near Main Street—in the library of University building.

It costs nothing, the object being to secure comfort, to save annoyance to the visitors. Every U. of B. man and woman is anxious to show you courtesy, so please wear your U. B. pin conspicuously.

Accommodations secured in advance, if desired.

Hotels, rooms and restaurants on the list all have the personal endorsement of some well-known Buffalo alumnus.

Mail, telegrams, and packages sent in care of this bureau will get prompt and proper attention.

The register will give the date of arrival, stopping place, time and route of departure and future address, if desired.

Hours—Bureau open from 8 a.m. to 6 p.m. At other hours mail, etc., can be obtained at the janitor's, No. 27 Goodrich Street —next north of High—in rear of College building. Telephone.

A room for lounging, reading and writing is in operation.

Car to all gates of the Exposition pass the corner near by.

To get there—take street cars marked Main at Main Street, which are going North and stop at High Street. The University building is next the corner.

THE Gowanda State Hospital will be enlarged by two wings that will be added to the present building or set of buildings. Each wing will cost at least $75,000, making the total expenditure $150,000. Provision for the money was made in past appropriation measures by the legislature, so there is no likelihood of failure or delay.

THE Cornell University Medical College, according to the New York *Tribune*, has recently acquired the library of the late Dr. Felix Victor Birch Hirschfield, who was professor of pathology and pathological anatomy at the University of Leipsic and director of the Leipsic Pathological Institute. This library which contains about 5,000 volumes, is said to be one of the most valuable pathological libraries in existence. It is a collection of the periodical literature of Germany, France and England on pathological subjects for more than fifty years, and contains detailed descriptions of the many discoveries made in that time.

The purchase was made by Prof. James Ewing in the name of the Loomis Laboratory. About $10,000 was paid for the books.

Book Reviews.

A MANUAL OF SURGICAL TREATMENT. By W. WATSON CHEYNE, M. B., F. R. C. S., F. R. S., Professor of Surgery in King's College, London; Surgeon to King's College Hospital, etc; and F. F BURGHARD, M. D. and M. S (Lond.), F. R. C. S, Teacher of Practical Surgery in King's College, London; Surgeon to King's College Hospital, etc. In seven imperial 8vo volumes, with illustrations. Volume IV, 383 pages with 138 illustrations. Philadelphia and New York: Lea Brothers & Co. 1900. [Cloth, $3.75 net.]

The fourth volume of this very excellent work on surgery bears out the promises made by the authors in the preface to the first book, and as the work goes on through successive volumes, it becomes more and more apparent that an ideal work on surgery is being given us. It is one which, as has been stated before, is comprehensive and practical. It deals not with the ginger-bread theories of surgery nor does it advise doing this, that, or the other because some one else has done it, or because it's pretty or theatric. On the contrary everything written of and every practice recommended has the stamp of common sense and the proof of long practice—and what is better than all, excellent result. Cheyne and Burghard are men of careful procedure and wide experience. They know what they do in surgery and why they do it, and they make it exceedingly clear to the reader that the best result in a given case can be obtained by following a certain procedure, which is laid down concisely and clearly without any frills or rhetoric.

Volume IV. deals with the treatment of the surgical affections of the joints—including excisions, and the spine—most difficult subjects to intelligently place before general readers How true this is, may be gathered from even a cursory skimming over of some of the standard works on surgery. Yet the same agreeable simplicity and modesty marks the handling of this volume as was so apparent—so refreshing—in the previous books by these authors. This trait is so strongly marked in no volume thus far issued as in the present, where they publicly acknowledge the reproduction in full of Dr. Percy Lewis's splendid manual of medical exercises, which is used as an appendix to the chapter on scoliosis. This is taken from Lewis's book, On the Relief and Cure of Spinal Curvature. So excellent is this work deemed by Cheyne and Burghard that they have reproduced the illustrations.

Another feature of this volume is the contribution of Dr. Leslie Walsh, of Bath, who has furnished a most practical account of the thermal treatment of rheumatoid arthritis, as practised at Bath. This is not only helpful but is extremely interesting.

There is in the preface a note of regret on the part of the writers having been reproached by "several critics" for not mentioning "certain methods of treatment to which they are personally addicted." Such criticism at best is narrow-minded, for it was explicitly stated in the first volume that the work would be largely confined to procedures which had proved most efficient in their hands. Some of the more recent methods of treatment may in time prove of great value, but until they are proven by accurate results to be better than the treatment laid down by Cheyne and Burghard, the latter cannot be consistently blamed for not using or recommending or even mentioning them. If they once started in to hand out literary bouquets to all the faddists in the field of surgery, they would be writing a very cumbersome and homely and useless encyclopedia, which, while a curiosity, would be nothing more or less than surgical rag-bag. Instead, they are getting out a very handsome and useful manual in seven volumes. Under the division devoted to surgical affection of the joints are considered injuries, such as dislocations, each of which is taken up in detail; sprains of joints and the wounds of joints. Under diseases of joints are the inflammations, tuberculosis, syphilis, nervous affections, torn bodies and rheumatoid arthritis.

The diseases of individual joints is most comprehensive and a great deal of attention is paid to careful diagnosis. The surgical affection of the spine includes injuries of all characters, spina bifida, kyphosis, scoliosis, tuberculosis, spondylitis deformans, acute osteomyelitis, actinomycosis, new growths, hysterical spine and sacro-coccygeal tumors.

The same uniformity of thought which has done much to place the whole work in the front rank of medical literature, characterises this book, and one is naturally lead to look forward to the forthcoming volumes with pleasurable anticipation. N.W.W.

THE STUDENT'S MANUAL OF VENEREAL DISEASES. By F. R STURGIS, M. D, sometime Clinical Professor of Venereal Diseases of the Medical Department of the University of the City of New York, etc. Duodecimo, pp. 216. Seventh edition, revised and in part rewritten by the author and Follen Cabot, M. D., Instructor in Genito-urinary and Venereal Diseases in the Cornell University Medical College. Philadelphia: P. Blakiston's Son & Co. 1901. [Price, $1.25.]

The seventh edition of this work, which has been revised and, as was the first edition, dedicated to the medical students of the United States, needs but little criticism. The three venereal diseases are considered, not exhaustively, but in a manner that brings out every important point regarding their diagnosis and treatment. Sturgis devotes but six or seven lines to the hypodermic medication in syphilis, saying on account of the pain and irritation produced, inunctions are far preferable. This statement must be contradicted, for these injections can be given with scarcely a moment's suffering, and as to results obtained, saying nothing regarding the nastiness of being smeared with grease, can in no way compare with those obtained by hypodermic medication.

Gonorrhea is treated of in a rational manner and it is pleasing to see no mention made of most of the new fangled remedies, for there is no doubt Cabot has tried many only to find as all do, sooner or later, that their value has been overestimated. In italics appears the statement "that many cases are continued by overtreatment," yet, the advice is given to explore the urethra with the sound or bulb, and to use the endoscope in subacute or chronic conditions and also, after the acute condition in the posterior urethra has subsided, silver in strong solutions are advised to be used with the Ultzmann syringe. This advice is dangerous, until a certain chronic condition is reached, for those who carry out the instructions given will find their case prolonged, if not made worse, all due to the fact that the patient has been overtreated; in fact, instead of soothing the condition it has been irritated.

Cabot gives a long dissertation on drugs for chordee and mentions that hot water is of value when used at night. In reality chordee should almost be omitted as a symptom in gonorrhea, but when it does occur hot water should be used four or five times a day, immersing the penis for at least five minutes each time.

The reviewer must disagree with the statement that the female urethra is the most common site of gonorrheal inflammation, for as compared with the cervix it ranks as one to twenty.

There is no apparent reason why the vulva should not receive the same treatment as is advised for the vagina, viz.: a 10 to 20 per cent. solution of silver, instead of as Cabot advises a 1-1000 solution.

One make-up of this volume seems to call for criticism, —its appearance. Punctuation has today reached a stage where even the most important sentence can be brought out, or given extra notice without being italicised, and a much more pleasing face is given the page. Although there are a few trivial points that do not entirely meet with the reviewer's opinion upon the subject, the work as a whole is so concise and up-to-date,and is cheerfullyrecommended to all. J.H.D.

A TREATISE ON APPENDICITIS. By GEORGE RYERSON FOWLER, M. D., Professor of Surgery in the New York Polyclinic; Examiner in Surgery, New York State Medical Examining Board; Surgeon to the Methodist-Episcopal Hospital; Surgeon-in-Chief to the Brooklyn Hospital, etc. Octavo, pages 235. Illustrated. Second edition, revised and enlarged. Philadelphia and London: J. B. Lippincott Co. 1900. [Price, $2.50.]

The last word has not been said as yet upon this most interesting and treacherous malady. It is because it is often so insidious and treacherous, that it becomes necessary to discuss it so frequently from different standpoints. Hence, the profession of medicine welcomes every monograph from authoritative hands that will throw additional light upon the screen, or aid in solving the many different problems that pertain to appendicitis.

This author is such a writer; he has had much experience at the bedside and operating-table, and, moreover, states his facts and opinions clearly and directly. The clinical pictures of the disease herein drawn are most instructive and helpful; and, besides, the section on differential diagnosis is one of the best we have seen. Complications, too, are most intelligently detailed, the infectious nature of the malady fully set forth and its bacteriology amply described.

In considering the nonoperative treatment of appendicitis, Fowler's opening paragraph is significant and really states the whole argument in a kernel. He says: "The absolute rejection of the operative treatment of appendicitis is only justifiable under circumstances where the consent of the patient, or those responsible for him, cannot be obtained, or when he is placed under conditions such as to prohibit the employment of proper surgical aid." It has taken a good while and some sad experiences to bring the profession to recognise, not to say admit, that appendicitis is a surgical disease, pure and simple, and that medicine, represented by drugs, has very little place in its management.

The operative treatment of appendicitis, as set forth by Fowler, is everything that could be desired. He considers the subject from every scientific viewpoint that has any practical bearing on the patient. His preparations are most complete, his execution is surgically artistic in the extreme, his after-treatment and dealing with post-operative complications embrace every known method of value. The illustrations are among the best, and reflect great credit upon the artist. Pictures can be made of great use in surgery, if they are accurate—they mislead greatly if they are not so. The author of this work is so artistic a surgeon that he could not admit to his book an inartistic or misleading illustration.

Many authors have written upon appendicitis; some excel in one direction, some in another. Each adds something to the general fund of knowledge. It has remained for Fowler to contribute so considerably toward the enlightenment of the profession on this subject, that his book easily takes rank in the forefront.

PROGRESSIVE MEDICINE. Volume I., 1901. A quarterly digest of advances, discoveries and improvements in the medical and surgical sciences. Edited by HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, bound in cloth, 430 pages, 11 illustrations. Philadelphia and New York: Lea Brothers & Co. 1901. [Per annum, in four cloth bound volumes, $10 00.]

The contents of this volume comprise sections on surgery of the head, neck and chest, prepared by J. Chalmers DaCosta; on infectious diseases, including acute rheumatism, croupous pneumonia and influenza, prepared by Frederick A. Packard; on diseases of children, prepared by Floyd M. Crandall; on pathology, prepared by Ludwig Hektoen; on laryngology and rhinology, prepared by A. Logan Turner; and on otology, prepared by Robert L. Randolph. These writers and compilers are well and favorably known to the profession. It is unlikely that they would permit their names to be attached to unworthy literature. The subjects dealt with, too, are of an eminently practical character; hence, they appeal to the practising physician and surgeon in city or country. The popularity of this form of literature appears to be constantly increasing. There is little wonder for this, because in this period of bustle and whirl the busy physician needs condensed chapters in short meter. In this series he gets them and they are of the best.

UTERINE TUMORS; THEIR PATHOLOGY AND TREATMENT. By W. ROGER WILLIAMS, Fellow of the Royal College of Surgeons. Duodecimo, pp. 375. Illustrated. New York: William Wood & Co. 1901. [Price, $3.00 net.]

The great interest attaching to the study of tumors of the uterus at the present day, makes any new light turned in upon their pathology or treatment eagerly sought after by gynecological surgeons all over the world. The preface to this book is one of the best we ever saw; it says, after quoting Herbert Spencer, that our medical science lacks the eye of philosophy; that it is a tangle of disjointed facts; that in the words of Reman, it is "not unlike a magnificent library turned upside down. Nearly everything is there, but in such a confused, pell-mell, and thoroughly unclassified state, that it might almost as well not be there." Further on he quotes Buckle as follows: "Our scientists display an inordinate respect for experiments, an undue love of minute details, and a disposition to over-rate the invention of new instruments, and the discoverers of new, but often insignificant facts. . . . . We are in the predicament, that our facts have outstripped our knowledge, and are now encumbering our march. The publications of our scientific institutions, and of our scientific authors, overflow with minute and countless details, which perplex the judgment, and which no memory can retain. In vain do we demand that they should be generalised and reduced into order. Instead of that the heap continues to swell."

The author of this monograph thinks that such being the condition of the science of medicine, the true task for authors now is generalisation and reduction into order of the masses of chaotic facts, that have been heaped upon the profession with such ruthlessness. He announces that he presents this book in the spirit foreshadowed in the foregoing abstract of his preface. How well he has succeeded only a careful reading of the work can determine. Every one interested will surely obtain it, because it is a contribution to the literature of a subject of transcendent importance, is well planned and interestingly written by a master of the topic; and, moreover, is easily the best recent monograph relating to it that has been offered to the medical profession.

OBSTETRIC AND GYNECOLOGIC NURSING. By E. P. DAVIS, A. M., M. D., Professor of Obstetrics in Jefferson Medical College and Philadelphia Polyclinic. Duodecimo, 402 pages, fully illustrated. Philadelphia and London. W. B. Saunders & Co. 1901. [Price, $1.75 net.]

While every nurse should be instructed well in the ground work or principles of the nursing profession, if we may be permitted to call it such, yet the obstetric nurse in particular needs special training to fit her for the responsible duties she is about to undertake. This, too, will apply in a large measure to the gynecologic nurse, whose duties are often as distinctly special, as are those of the gynecologist himself.

As there are specialists among physicians or in the medical profession, so, too, are there specialists among nurses, hence it is most fitting and timely that special works on the several specialties pertaining to nursing should be written and delivered to the profession of nursing. The book before us is prepared by an experienced instructor, one who well knows the needs of nurses in the special branches of obstetrics and gynecology. In it one will find the essentials of the subjects treated of, told in an interesting manner. It instructs the nurse in regard to natural pregnancy, as well as the signs and accidents of disease that may occur during gestation. There is also careful instruction given concerning the care of the woman during labor, and the needs of the child during the early weeks of its life. The principles of asepsis and antisepsis are admirably discussed, so that the gynecologic nurse may be well informed as to those important topics.

An appendix contains an excellent dietary and a section regarding the preparation of surgical supplies. It is a book that should be in the hands of every one who may be called upon to do obstetric or gynecologic nursing. Its teachings are sound, its instructions are plain, and it is the most complete work of its kind that has yet been published.

A REFERENCE HANDBOOK OF THE MEDICAL SCIENCES. Embracing the Entire Range of Scientific and Practical Medicine and Allied Science. By various writers. A new edition, completely revised and rewritten. Edited by ALBERT H. BUCK, M. D., New York City. Volume II. Bla–Chl. Illustrated by numerous chromo-lithographs and 765 half-tone and wood engravings. Nine volumes, imperial 8vo. New York: William Wood & Co. 1901. [Price, muslin, $6.00 per volume; leather, $7.00 per volume; half-morocco, $8.00 per volume.]

The second volume of this elaborate series is a most satisfying book, whether viewed from its scientific importance or from the artistic quality of its engravings. The article on the blood is an excellent exposition of our present knowledge concerning the pathology and methods of studying the life-giving current. It is well worth the price of the volume, to say nothing of the wealth of material the book contains besides, this one paper. Another contribution of great importance is that on the brain, which is exhaustive in character, as well as scientific in its manner of presentation. Medical officers in the military service will be much interested in the article on camp diseases, which is well written and modern in its material. And so we might go on pointing out subjects of importance that are superbly considered in this volume; but we could not be expected to review the book in the ordinary sense of the word, for it would take up the entire space of this issue of the magazine, index and all, to give critical analysis of each article.

The Buffalo contributors to this number are Herbert M. Hill, Abram T. Kerr (now of Ithaca) and Julius Pohlman—names well-known in the literature of medicine, and competent men to perform their full share in making this volume a credit to the profession.

Some of the plates are superb, among which may be mentioned No. xxi., illustrating carcinoma of the skin, also Councilman's photomicrographs (plate xx.) showing some of the characteristics of carcinoma. The subscribers to this series need not feel anxious about their investment—it is one of the best that can be made in a reference work of medicine.

DISEASES OF THE NOSE AND THROAT. By D. BRADEN KYLE, M. D., Clinical Professor of Laryngology and Rhinology, Jefferson Medical College, Philadelphia; Consulting Laryngologist, Rhinologist and Otologist, St. Agnes' Hospital. Second edition, revised. Octavo, 646 pages. Over 150 illustrations and 6 lithographic plates. Philadelphia and London: W. B. Saunders & Co. 1901. [Cloth, $4.00 net.]

This excellent treatise, the first edition of which was reviewed in the JOURNAL, January, 1900, has appeared again within an unusually short time. This, alone, indicates the appreciation the work received at the hands of specialists, since, in the nature of things, they must be the largest purchasers. There is, however, much in the book that will aid and instruct the general practitioner of medicine. It is he, often, who will treat the simpler forms of diseases of the nose and throat; or will minister to others in their initial stages, hence he must, perforce, inform himself as to methods of diagnosis and become more or less skilful in the instrumentation of these passages.

The author is strong in the pathological handling of his subject, and for this the specialist will be thankful, though it may be too intricate for the untrained in technical knowledge of the microscope. Diseases of the upper air tract are so often the cause of reflex symptoms below, which mislead in management, that it behooves every physician to be on the alert in these matters, lest grievous errors be committed in the name of medical treatment. Kyle's book is one that deserves careful study, as it easily takes rank among the best works on laryngology yet printed. This edition does not differ materially from the last, but some errors have been corrected and in general matters it has been brought forward to the immediate present. Its illustrations deserve special commendation.

DISEASES OF THE HEART; THEIR DIAGNOSIS AND TREATMENT. By ALBERT ABRAMS, A. M., M. D., San Francisco, Consulting Physician for Diseases of the Chest, Mt. Zion Hospital and the French Hospital. Illustrated. Pages, 172. Chicago: G. P. Engelhard & Co. 1900. [Price, $1.00.]

In this little volume, which treats the subject monographically, the author discusses the diseases of the heart from a practical aspect. Much stress is laid upon the careful painstaking examination necessary to arrive at a correct diagnosis and some of the author's most noteworthy researches in methods of diagnosis, are here recorded for the first time in collected form. The author takes up the treatment of these cases in a practical, methodical manner, going into the careful details, minor or secondary treatment.

The book is to be commended. The type and paper is excellent.

W.C.K.

BOOKS RECEIVED.

Etidorpha or the End of Earth. The Strange History of a Mysterious Being and the Account of a Remarkable Journey. By John Uri Lloyd, author of Stringtown on the Pike. With many illustrations by J. Augustus Knapp. Eleventh edition revised and enlarged. New York: Dodd, Mead & Co. 1901. [Price, $1.50.]

Transactions of the American Associations of Obstetricians and Gynecologists. Thirteenth annual meeting held at Louisville, September 18, 19 and 20, 1900. William Warren Potter, M. D., Secretary. Philadelphia: William J. Dornan, Printer. 1901.

Progressive Medicine, Vol. II., June, 1901. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by

Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in Jefferson Medical College of Philadelphia. Octavo, handsomely bound in cloth, 460 pages, with 81 engravings and one full-page plate. Issued Quarterly, Philadelphia and New York: Lea Brothers & Co. 1901. [Price, $10.00 per year.]

A System of Physiologic Therapeutics. A Practical Exposition of the Methods, Other than Drug-Giving, Useful in the Treatment of the Sick. Edited by Solomon Solis Cohen, A. M., M. D., Professor of Medicine and Therapeutics in the Philadelphia Polyclinic; Lecturer on Clinical Medicine at Jefferson Medical College, etc. Volume II. Electrotherapy, by George W. Jacoby, M. D., Consulting Neurologist to the German Hospital, New York City; to the Infirmary for Women and Children, etc. In two books: Book II. Diagnosis; Therapeutics. Illustrated. Philadelphia: P. Blakiston's Son & Co. 1901. [Price, eleven volumes, $22.00 net.]

Operative Surgery. By Joseph D. Bryant, M. D., Professor of the Principles and Practice of Surgery, Operative and Clinical Surgery, University and Bellevue Hospital Medical College; Visiting Surgeon to Bellevue and St. Vincent's Hospital, etc. Vol. II. Operations on Mouth, Nose and Esophagus, the Viscera connected with the Peritoneum, the Thorax and Neck, Scrotum and Penis, and miscellaneous operations. 8vo, pp. 729. 857 illustrations, including 40 colored ones. New York: D. Appleton & Co. 1901.

Transactions of the Twenty-second Annual Meeting of the American Laryngological Association held in the City of Washington, D C., May 1, 2 and 3, 1900. Dr. James E. Newcomb, Secretary. New York: Carey Printing Co. 1901.

LITERARY NOTES.

THE New York Pharmacal Association, Yonkers, N.Y., has issued a pamphlet entitled, Facts and Figures, medical and otherwise, from the census of 1900, and other reliable sources. It is a handsome brochure of 64 pages, containing maps, charts, tables and texts of great interest and which cannot be found elsewhere grouped between two covers. It will be supplied on application to the publishers.

Dr. S. A. ARANY, of Carlsbad, has published the second edition of the British-American guide to Carlsbad. It is a handsomely printed and well illustrated brochure of 90 pages. Price, 1 shilling, and may be obtained at any of Thomas Cook & Sons' offices.

J. B. LIPPINCOTT CO., publishers, Philadelphia, announces as in course of publication Dr. George Henry Fox's Atlas of Skin Diseases. It is issued in monthly parts, consisting of five colored life-like plates, reproduced photographically from actual cases. Each part also contains fourteen pages of text and five pages descriptive of the plates. The entire work when completed will embrace a comprehensive and practical treatise upon the subject of skin diseases by one of the highest American authorities; also eighty full-page plates executed in a faithful and superior manner. This work is of great value not only to dermatologists, but to general practitioners as well.

THE *Quarterly Journal of Inebriety* will publish in the July number a symposium of the most authoritative scientific papers, recently read before medical societies in this country and Europe, on the physiological and pathological action of alcohol. These papers will contain the latest facts and conclusions, on the action of alcohol as a beverage and medicine, and be of absorbing interest to every physician and person interested in this topic. A large edition will be issued and extra copies will be mailed to any address on the receipt of 75 cents in stamps or currency. Address, T. D. Crothers, M.D., Editor, Hartford, Conn.

WILLIAM M. WARREN, ESQ., medical publisher, Detroit, Mich., announces that the editor of the *Therapeutic Gazette*, Dr. Hobart A. Hare, has removed his office from 222 South 15th Street, to the N. W. Cor. 18th and Spruce Streets, Philadelphia.

MESSRS. BATTLE & CO., St. Louis, have issued chart No. 4 of the series, illustrating fractures of the long bones. This chart delineates fracture of the neck of the femur, with the muscles in color, as in the previous issues.

ITEM.

THE Congress on Tuberculosis will be held at London, July 23-26, 1901. The British Medical Association will meet at Cheltenham, July 29-August 2, 1901. A medical excursion is planning to attend these meetings under the management of H. Gaze & Sons, 113 Broadway, New York. The cost for a twenty-nine day trip is $238.00. The itinery is as follows: July 10th, leave New York by Red Star Line, new twin screw express steamer Zeeland; July 18th, due at Cherbourg and proceed to Paris. (Oceanic Hotel); July 19th, Paris, to July 22d; leaving Paris evening of 22d for London; July 23d to July 28th, London. St. Ermin's Hotel; July 29th, at Cheltenham, to August 1st; sail August 1st from Liverpool by Ss. New England; August 8th, due at Boston.

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